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Foreword

The First International Seminar & Conference on Education 2016, Building Education Ecosystem, represents a growth and experience of a conference on education. The purpose of this seminar and conference is to make a scientific contribution to the field of education through discussion and publication on progress in English Language Education, Mathematics, Managements, Physics, Arts, Biology, Indonesian Language studies, Civic, and Sociology. Contributions come from experts, teachers, lecturers and graduate students from all around the archipelago.

This year the conference received 80 paper submissions and around 47 selected papers to publish at the proceeding papers. The conference invited keynote speakers from four different countries, they were from Malaysia, Japan, Australia, and Indonesia itself. Decisions about paper acceptances were reviewed and approved by the steering committee and reviewers.

The collection of papers in this conference proceedings shows a maturity in the field through new examples of pedagogical issues and theoretical advances in understanding education ecosystems. The conference success as we see publications that build on the advance references to papers published. We look forward to this publication providing the foundation for future developments in Education issues or education ecosystem.

Makassar, May 5, 2016
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Biology Education, Natural Science:

Benefit of Guest Lecturer in Increasing Questioning Ability about Human Reproduction System

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ABSTRACT

This research goal was to gain knowledge in student ability of questioning based on Bloom question, average score increase in student questioning ability and student response in the use of guest lecturer in the sub-concept study of Human Reproduction System. This study had two variables, in which "guest lecturer use" will function as independent variable and student questioning ability in the sub-concept study of Human Reproduction System as dependent variable. In this research, Quasi Experiment with design "One Group Pre-test and Post-test" is used. "This research performed on students of 9th grade of PGRI Jakarta Timur middle school with 35 students as sample. The research instrument used to gather data is question instrument for pre-test and post-test, student questionnaire and interview. From the test, average difference obtained show that pre-test and post-test is 29, 7184 > 24, 3982; also for upper category the score obtained is higher than the pretest score, that is 34, 2816 > 27, 3732. Furthermore, from the test average difference, it can be seen that between pre-test and post-test give the significance p < 0,05; thus conclude that there is difference in score result in pre-test and post-test.

Keywords: Bloom, Human, Reproduction, response, guest lecturer,

Introduction

Asking is part of human daily activity "Apparently there is no human that did not ask a question, whether on themself or others" (Rustaman et.al. 2003: 224). In the teaching and learning activity (Kegiatan Belajar Mengajar /KBM), asking is part of student activity within it. But, in practices there are things that become a reason.

Firstly, there is no specified times or limited time level located by the teacher to give the chance for the student to ask, be it in main activity or closing activity.

Secondly, student finds it bothersome to ask. According to Jusuf (1980: 43) "Sign of every laziness is a reluctance to discipline". This question basing Eviani find (2001: 38) in his research that "Students is not used to asking. So, when presented the chance to ask no one is presenting a question".

Seeing the numerous amoral case happen in society especially in teenager which in fact a student, it is then chosen the sub concept of Human Reproduction System as research material. Besides, because this matter deemed appropriate with guest lecturer (guest lecturer mentioned refers to doctor specializing in maternal and birth disease, or other profession in accordance with human reproduction).

Sex education become important in bridging between teenage curiosities of sex. Different kinds of vulgar sex information is

received by student outside the school, thus information of sexuality which is honest, whole and appropriated to match the student age is needed to be given to student. It is hoped that the guest lecturer could give a positive stimulus for student to enthusiastic questioning, direct consultation and full fill knowledge thirst to the lecture given by the lecturer.

Component used in this research include:

a. The parameter measured is student ability in spoken and written form.
b. Question category researched is question categorized by Bloom in which cognitive range C1-C6 (see table 1).
c. Benefit of guest lecturer in increasing student questioning of grade 9th student in the sub concept of Human Reproduction System.
d. Lecture method used in this research is preaching, question-answer and discussion.
e. Researched material is sub concept of Human Reproduction System and constrained in men and women reproduction organ structure, menstruation cycle, fertilization and twin zygote implantation (identical and non- identical), also sexual disease.

Research Method

Research is performed on October 2013 until March 2014, taking place in PGRI 45 Jakarta Timur middle school on 9th B grade student.

Research performed using Quasi Experiment method with "One Group Pre-test and Post-test" (Nazir, 1988:279) design. In this research pre-test and post-test question instrument and additional instrument of student questionnaire and interview. Question include picture and statement regarding Human Reproduction System which constrained in men and women reproduction organ structure, menstruation cycle, fertilization and twin zygote implantation (identical and non-identical), also sexual disease. Picture in the questionnaire matched with learning media used in the teaching and learning activity (Kegiatan Belajar Mengajar /KBM) which consist of 3 dimension of men and women reproduction organ structure and menstruation cycle chart. Student questionnaire is aimed at all student and distributed when the lecture is ongoing while interview only aimed at 3 person representing the upper, middle and bottom group and performed after the lecture.

Question test is performed to test its reliability, validity and differentiation ability. This was performed to ensure the question fulfill the condition as good research instrument.

Written question is filtered in pre-test with tasking (one day before lecture) and post-test given after the lecture. Meanwhile, direct questioning filtered when question and answer session with guest lecturer. For written question, student given pre-test question and post-test in form of picture and question which refer to sub concept of Human Reproduction System. And with those question, student expected to submit a minimal three written question. In data procession, two and three question used with equal cognitive level or one with different cognitive is consecutive series from highest cognitive level. Then student question is not based on difficulty level but on the number of element which must be classified based on Bloom. Score then given according to cognitive level of score 1 for question C1, 2 for C2, 3 for C3, 4

for C4, 5 for C5 and 6 for C6. If question is not relevant to the then the question being referred to is given 0 (zero) score and not included in one of Bloom category. This scoring rules also apply to spoken question in the submitted in the question and answer session with guest lecturer and accumulated as post-test score.

Result and Discussion

Research result

Student questioning ability gathered from pre-test and post-test students is as much as 736 questions. From those numbers, it is found that 361 written questions in pre-test and 375 questions in post-test students in form of 361 written questions and 14 spoken questions. The tabulated form of questioning ability of each pre-test and post-test students question can be seen in the following table:

Table 2. Student questioning ability in each question

Question Number	Category						
	C1	C2	C3	C4	C5	C6	TR
Pre-test (Written)							
1	40	19	1	5	1	0	0
2	30	15	5	9	0	1	3
3	18	30	1	10	2	1	0
4	20	20	1	6	1	0	1
5	7	30	4	15	1	2	1
6	20	9	5	20	5	2	0
Total	135	123	17	65	10	6	5
Post-test (Written)							
1	25	14	6	10	2	4	0
2	27	13	6	11	0	1	2
3	9	25	5	12	1	5	1
4	20	21	4	11	2	0	2
5	6	25	8	11	1	7	1
6	20	10	6	15	10	1	0
Total	107	108	35	70	16	19	6
Post-test (Spoken)							
1	1	0	0	3	2	0	
2	0	0	0	1	0	0	
3	0	0	0	0	0	0	
4	0	1	1	0	0	0	
5	0	1	0	0	1	1	
6	0	0	1	1	0	0	
Total	1	2	2	5	3	1	

Table 3. Student questioning ability in all questions

Category Question	Pretest		Posttest	
	Total	Percentage (%)	Total	Percentage (%)
Written				
C1	135	37,39	107	28,53
C2	123	34,07	108	28,8
C3	17	4,70	35	9,33
C4	65	18,00	70	18,66
C5	10	2,77	16	4,26
C6	6	1,66	19	5,06
TR	5	1,38	6	1,6
Category Question	Pretest		Posttest	
	Total	Percentage (%)	Total	Percentage (%)
Written				
C1	-	-	1	0,26
C2	-	-	2	0,53
C3	-	-	2	0,53
C4	-	-	5	1,33
C5	-	-	3	0,8
C6	-	-	1	0,26
TR	-	-	0	0,00
Total	361	100/99,97	375	100/99,95

Note: TR (Question is not relevant)

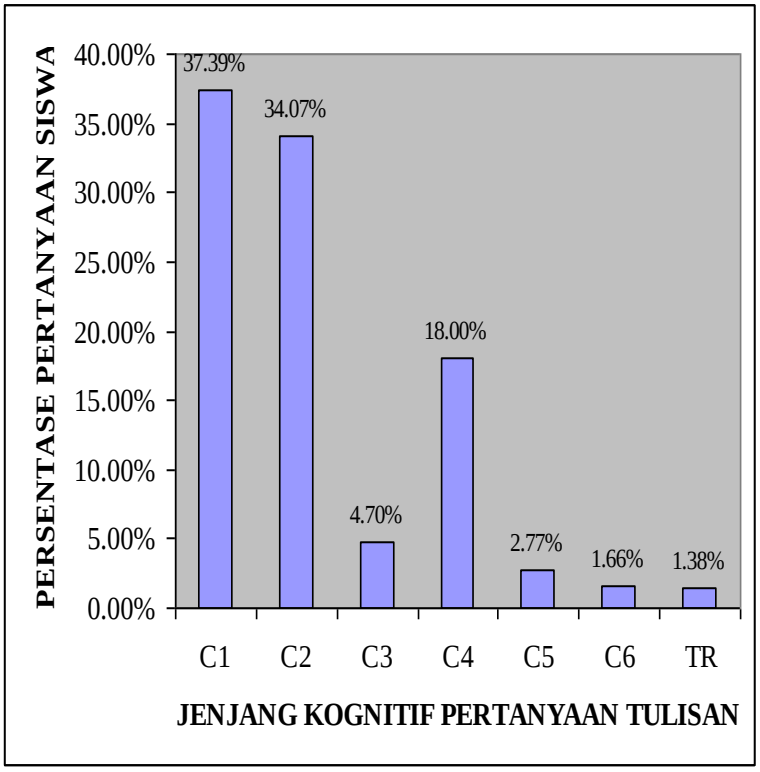
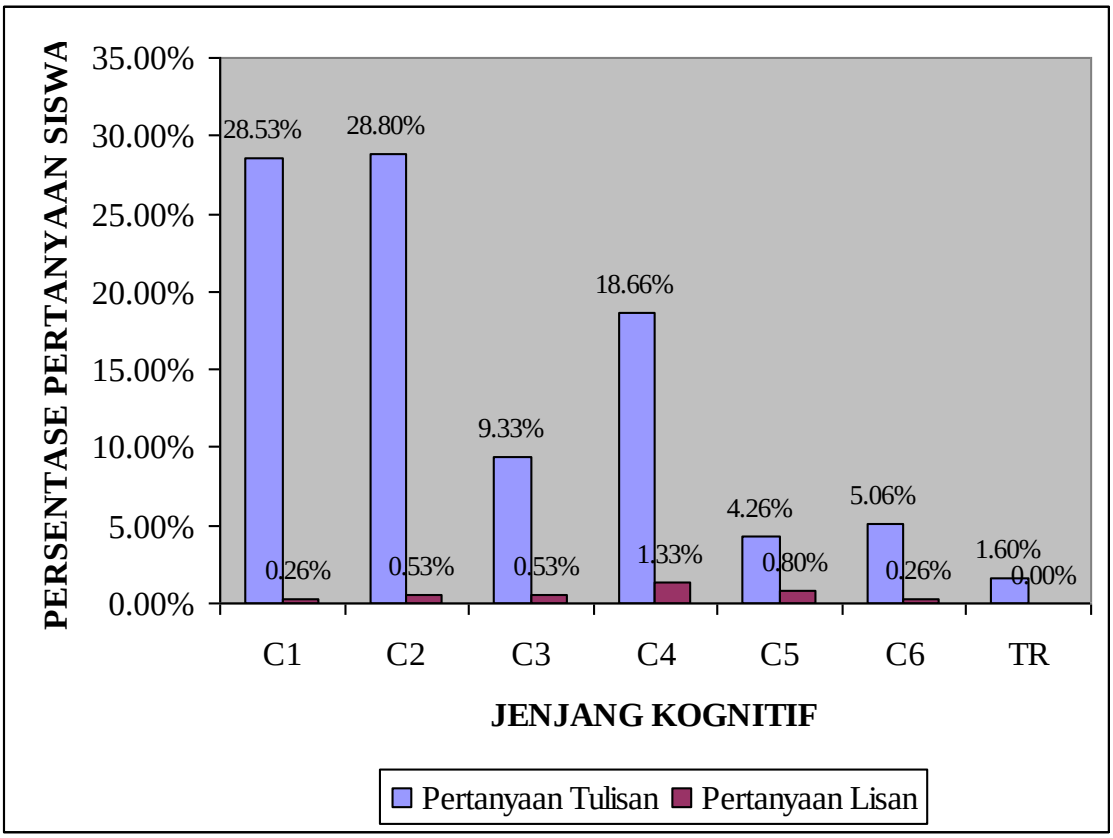


Chart 1. Student questioning ability pretest

From the chart, we know the sequence from high to low cognitive level percentage represented by the bar height is C1, C2, C4, C3, C5, C6 and TR. Then, understanding percentage cognitive level of the bottom and high level is acquired by summing each level percentage. Cognitive question percentage in the lower level is 76.76% acquired from summation of cognitive level C1, C2 & C3. While high level cognitive question acquired from percentage cognitive question of level C4, C5 & C6 is 22.43%.



Graphic 2. Student questioning ability in post-test question

From the graphic we know the sequence from high to low total percentage represented by bar height of every written cognitive question level is C2, C1, C4, C3, C6, C5, and TR. While sequence from high to low total percentage level of written question is C4, C5, C2-C3, C1-C6, and. Then, the knowledge of the percentage of cognitive questioning the low and high level is acquired with summation of every level. Written question percentage of cognitive level is 67.98% and spoken questions 1.32% acquired from cognitive level of C1, C2 and C3. While high level of cognitive question percentage is acquired from summation of cognitive level C4, C5, and C6 is 30.37% which consist of 27.98% written question and 2.39% spoken question.

To understand the comparison of student questioning ability before (pre-test) and after (post-test) lecture with guest lecturer can be seen through chart below:

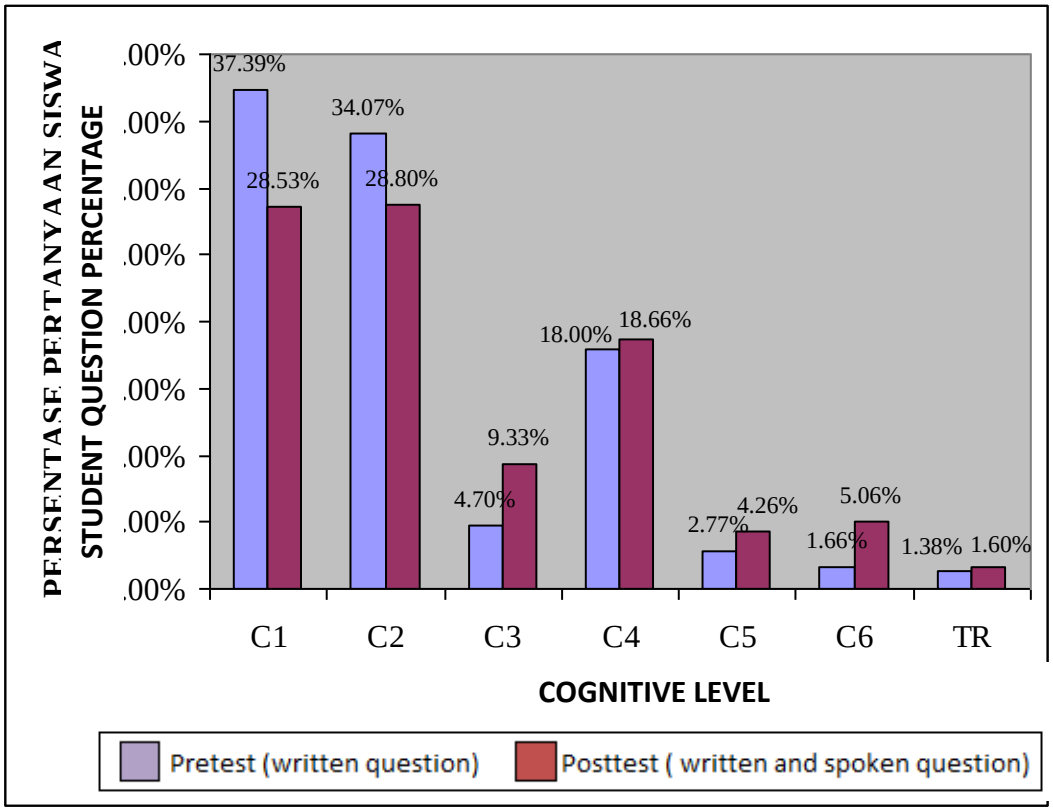


Chart 3. Comparison of student questioning ability

Comparison between student questioning ability in pretest and post-test is clearly seen and bar height which represented the total question in each level. After compared, it was found that percentage drop in question C1 and C2 is followed by rise in C3 through C6 and TR question.

Student questioning ability recapitulation result for each students based on score and value presented in the following table:

Table 4. Recapitulation Students Score and Value

No. Student	Pre-test		Post-test	
	Score	value	Score	Value
1	24	33.3	19	26.4
2	20	27.8	33	45.8
3	26	36.1	31	43.1
4	27	37.5	27	37.5
5	29	40.3	37	51.4
6	25	34.7	36	50.0
7	23	31.9	30	41.7
8	22	30.6	26	36.1
9	27	37.5	28	38.9
10	30	41.7	39	54.2
11	25	34.7	34	47.2
12	24	33.3	31	43.1
13	27	37.5	34	47.2

14	24	33.3	28	38.9
15	31	43.1	38	52.8
16	25	34.7	26	36.1
17	24	33.3	31	43.1
18	29	40.3	31	43.1
19	26	36.1	32	44.4
20	33	45.8	35	48.6
21	21	29.2	24	33.3
22	40	55.6	50	69.4
23	34	47.2	41	56.9
24	26	36.1	28	38.9
25	24	33.3	28	38.9
26	24	33.3	25	34.7
27	25	34.7	30	41.7
28	24	33.3	26	36.1
29	25	34.7	40	55.6
30	25	34.7	44	61.1
31	24	33.3	32	44.4
32	17	23.6	22	30.6
33	31	43.1	42	58.3
34	25	34.7	36	50.0
35	20	27.8	26	36.1

From the proceeding table 4 above, students questioning ability is then classified into high, middle and low group (Arikunto:2003, 264).

Classification result based on the score in the recapitulation above is presented in the following table:

Table 5. Student classification based on student questioning ability

Group	**Pretest**		**Posttest**	
	Total student	**Percentage (%)**	**Total student**	**Percentage (%)**
very good	-	0,00	1	2,86
good	5	14,28	17	48,57
pretty good	30	85,71	17	48,57
Total	35	100	35	100

Table 6. Position Result of Student Questioning Ability

Group position	Total Student	No. Student	Group Pre-test – posttest	Percentage (%)
Descend	1	1	pretty good – pretty good	2,86
Still	1	4	pretty good – pretty good	2,86
Ascend	33	see table 4.3	see Table 4.3	94,28
Total	35	35		100

After directed by guest lecturer, 34 students is classified as ascending group. As much as 1 student or 2.86% of total students is classified into the descending group.

Student questionnaire processing and interview used as complimentary data to gain knowledge of how students respond to the use of guest lecturer in the sub concept Human Reproduction System. Student questionnaire aimed at all level students and given together with post-test while interview is aimed at three students represent the high, middle and low group and take place after the lecture.

Then, even further, from the gathered data show that between pre-test and post-test give significant percentage < 0,05; which conclude that distinction exist between pre-test and post-test .

Research Examination

Student questioning ability

From the research result of question instrument data of student questioning ability. Table 2 give a picture about student questioning ability of every pre-test and post-test question. For pre-test, total question of C1 type is much more asked in the concept of means reproductive organ because information picture contain a lot of biological term. Students tend to ask about function of terms in the picture. Questioning ability of student for every pre-test question has the same pattern as post-test one. But, increase and decrease of total for every cognitive level of certain question.

General view on student questioning ability in level of the question which marked with percentage of every cognitive level is shown in table 3. Cognitive questioning low level which a percentage of combination from memory level question(C1), understanding level (C2) and application level (C3) is 75.77% in pre-test and 65.43% in post-test. While cognitive questioning high level which is a percentage combination from analytical question level (C4), synthetic level (C5) and evaluation level (C6) is acquired at 22.38% in pre-test and 32.26% in pre-test . Thus, we know that general level student questioning ability in pre-test and post-test is low level cognitive question.

Chart 1. About question ability in pre-test show sequence from high to low of total written question percentage represented by high bar of C1, C2, C3, C4, C5, C6 and TR.

Question C1 and C2 is the dominant question made by the students. Meaning, before lecture, students only capable remembering and understanding a concept from primary source like the book they read. From questionnaire 1 uncovered the fact that only 10 students or 28.56% felt a difficulty in making C2 type question with observing and picture interpreting as indicator. In other words, a 71.42% of students feeling confident and with ease making a C1 and C2 type question.

The number of C4 question from chart 1 is more than C3, even though its cognitive level is higher. From questionnaire 1 54.28% feeling difficulty to apply picture with fact in field that indicate a question of C3 type. So it's normal that C3 is less than C4.

Questioning ability of student in post-test like pictured in chart2 show a different formation. Generally, percentage of every level is increasing because of accumulation from a 3.22% of spoken question After lecture, the highest sequence of question percentage formation (written and spoken) is turning into C2, C1, C4, C3, C6, C5 and TR. From procession of questionnaire data as much as 68, 57% of students change their question because of the information gathered from guest lecturer rising another questions, thus changing question level into C4 level.

At the main event, guest lecturer give information through question and answer session with students and adding questions which dig into memory and a little of students understanding.

Because C1 question is already discussed with guest lecturer with purpose to rise the old and new understanding and stimulate student to increase their thinking ability from low level thinking to higher thinking level. Then students tend to be interested to make a higher level question From students answer in 6th questionnaire, guest lecturer could increase understanding because explanation goes deeper. The increase in students understanding after lecture with guest lecturer causes students to tend to have an easier time making question of C2 type.

In the post-test, C6 question percentage turn out to be higher than C5. Meaning while their understanding (shown by dominant C2 type questioning ability), student already capable of making a question which directing to consideration of a statement. With these questions students wanted a confirmation on the questions they already made.

Comparison of student questioning ability before and after lecture depicted in the chart 3, shown a decline in total questions of C1 and C2 a 9.49% and 6.88% each. These numbers enough to indicate the shift students question orientation to a higher cognitive question level. On the other hand the total percentage increase in pre-test questions to post-test questions of 6, 08% C3; 4, 28% C4; 2,45% C5; 3,15% C6, and 0,4% of irrelevant questions (TR). The increase of TR in the post-test is due to some students still having difficulties in submitting a relevant questions.

But, this research show low level cognitive question percentage which sea-level era 75,27% in pre-test and 65,43% in post-test, means there exist a significant difference from the past research.

The high percentage of low level cognitive questions affected by some factors. First questioning habit factor. Second class supporting capacity factor which support low level student group to ask for risk of being laughed at by their friends.

Third, reading factor. Students does not know what to ask due to not understanding the concept the question content. Reading ability is basic to understand fields of study. From that explanation it can be concluded that the high level of low cognitive question level is due to students not reading in entirety and did not understand the concept resulting in difficulty in making a high level cognitive questions.

Fourth, interest factor also play a role cause when student had the curiosity to study, he will level quickly learn and remember.

Student questioning ability is then classified into 3 group according to the scoring rule, just as mentioned in table 5. From calculation it was known that more than 50% of the students is in the middle group, trailed by high level group and low level group. Meaning student ability in presenting a question is reasonably good.

Average score increase in student questioning ability

Average student questioning ability score is gained by average value (mean). In pre-test the scoring average of student questioning ability is 25,814 while in the post-test 32,000. From the total test performed, the data of student questioning ability in pre-test and post-test have a normal distribution then followed by one way hypothetical test with testing, the value acquired is Zhit = - 4,362 and Ztab= - 1,645, then in the = 0,056, H0 declined (H1 accepted). Meaning confidence level 95%, average score of student questioning in pre-test and post-test differ significantly. In another word from the data sample supporting the statement that average student questioning ability is lower in the pre-test than in the post-test. This statistic hypothesis prove the average score increase of student questioning ability after the use of guest lecturer , also support the research hypothesis which state that guest lecturer could increase student questioning ability in the sub concept of Human Reproduction System.

Interview result and student questionnaire show positive response to the use of guest lecturer. From questionnaire procession 54.28% student having difficulty to make a written question of looking for picture use with fact in the field. Rather, after lecture 68.57% change the question they presented.

But after lecture with guest lecturer, as much as 34.28% of student become interested to ask due to availability of direct interaction with guest lecturer.

About the sub concept of Human Reproduction System as much as 77, 14% student argue that the lesson become more interesting after being explained.

One of the point which become the student response barometer is argument of a level students (100% of students) about the use of guest lecturer which increase their knowledge because of the deeper understanding. According to the interview result, student from high and middle performance group answer that they have presented a question in lecture and feel that guest lecturer and class atmosphere is supporting them to dare to present a question.

Spoken questioning ability increase affirmed through hypothesis statistic which state that average score of student presenting a questioning pre-test is lower than in the post-test, in other word there is an increase in average score of student questioning ability.

A compatibility is found between interview result and questionnaire which is an increase in student understanding ability with guest lecturer.

The increase in student questioning ability is caused by some factors. First, scoring factor. Second, guest lecturer factor. According to questionnaire, student argue that the use of guest lecturer could increase their understanding due to the deeper explanation. And Third, student factor. Questionnaire result show that

guest lecturer push the student from high and middle performance group to be brave enough to present a question.

Conclusion

According to the research it can be concluded that:

There is correlation between the uses of guest lecturer with student questioning ability. There exist a difference of score in pre-test and post-test. There is an increase in average score of student questioning ability after using guest lecturer.

Suggestion

1. To increase student questioning ability it's better to use guest lecturer which could help student understand and increase about the lesson in school classes.
2. Due to the short amount of time
3. The teacher is expected to be a good lecturer.

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Differences in Learning Outcomes in Subject of Natural Science through Checks Pair of Cooperative Learning Model and Cooperative Learning Model Make a Match

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ABSTRACT

This research uses quasi experimental method which conducted in SDN Bojonggede 07. The purpose of this research is to find the differences between pair checks model and make a match model. The population of this research is students at the fourth grade. The result of this research showed that in the normality test, third of this sample is a normal distribution because the value of Ltest smaller than Ltable. Then in test of homogeneity obtained χ 2test of 1,782$\leqslant$ χ 2tabel 5,991. The next on the hypothesis of the third sample t-test is bigger than t-table, it shows that the hypothesis of this research accepted. The results of this research are (1) There is the differences of the learning process in the natural science subject through cooperative learning pair checks, they got the score N-Gain 65 which is 86,6% and conventional learning got the score N-Gain 51 which is 56,6%. (2)There is the differences of the learning process in the natural science subject through make a match, they got the score N-Gain 58 which is 66,6% and conventional learning got the score N-Gain 51 which is 56,6%. (3) There is the differences of the learning process in the natural science subject through cooperative learning pair checks, they got the score N-Gain 65 which is 86,6% and make a match learning they got the score N-Gain 58 which is 66,6%. Based on the result of this research concluded that there are the differences between cooperative learning process pair checks and make a match in natural science.

Keywords: study results, pair checks, and make a match.

Introduction

Natural science has a very important role in many aspects of life. Then science should be given every level of education. In fact, even though science has been given to every level of education does not mean students master science well.

This can be demonstrated by the low achievements in the natural sciences that come from surveys Human Development Index (HDI) released by UNDP reported that Indonesia is the ranking of 124 in 2012 from 178 countries, and rank 121 in 2013 from 185 countries studied. Science learning achievement from year to year is relatively low. According to The International Trends Mathematics and Science Study (TIMSS), which is an activity of The International Association for Evaluation of International Achievement (IEA), is an organization engaged in the field of educational assessment and measurement in the Netherlands implemented four years. In the TIMSS survey in 2011 followed by 42 countries, Indonesian students rank 38th in math and 40th order for science.

The results of a similar study conducted by the institute The Programme for International Student Assessment (PISA), also shows the quality of Indonesian students still low. Based on the results of studies conducted by the educational institution PISA 2012, which examines three aspects: reading, math, and science. In the students' science literacy Indonesia ranks 64th out of 65 countries. In this case the students' achievement in the field of science subjects is still far below the achievements of the participating countries.

That was collected through interviews in SD Negeri Bojonggede 07, there are student learning outcomes that have not reached the KKM (Criterion Complete Minimal). Information based on data obtained indicates that the specified KKM SD Negeri Bojonggede 07 Odd Semester Academic Year 2015/2016 for the subjects of Natural Sciences (IPA) is 93. From the fourth grade class sizes, the VA with a number of 30 students found that 66.6% still scored below the KKM, while IVB with the number of 33 students turned out there were 63.3% who still score below KKM, as well as in IVC classes with the number of 30 students are 66.6% still score below the KKM.

During this learning process of natural science who conducted the class IV where they lack applying the learning model that is creative and varied in the learning process and the resulting lack of interest of students to participate actively in the following study. The lecture method is still predominantly used during the learning process makes it less effective process of learning, where students are less actively involved in learning. Besides the one-way communication between students and teachers that do not provide the opportunity for students to explore their own knowledge. So students only listen to the material presented without actively involved in the learning process and makes the learning ineffective and result in low learning outcomes.

Efforts should be made to improve the quality of student learning in natural science subjects by using model are more varied and creatively adapted to the material to be studied so that it can help students to enhance and improve the knowledge that has been previously owned. Therefore the pair checks cooperative learning and cooperative learning model make a match were selected in this study, because both of these learning models have had the advantage that, to enhance the activity of student learning and communication train students to express their understanding.

Based on the problems described above, it is necessary to study differences Learning Outcomes Studies on Subjects of Natural Science Through model cooperative learning pair of checks by the Cooperative Learning Model make a match Students of Class IV State Primary School Bojonggede 07 Bogor regency in the academic year 2015 / 2016.

"The formulation of the problem in the study are as follows:

1. Is there a difference in learning outcomes Natural science through cooperative learning model Pair of checks and conventional learning models in the fourth grade students at State Elementary School 07 Bojonggede Bogor Regency?
2. Are there differences in learning outcomes Natural science through cooperative learning model Make a match and conventional learning models in the fourth grade students at

State Elementary School 07 Bojonggede Bogor Regency?

3. Are there differences in learning outcomes Natural science through cooperative learning model Pair of checks and learning models make a match in the fourth grade students at State Elementary School 07 Bojonggede Bogor Regency?

Learning is a process of a person who tried to obtain a form of behavior change relatively sedentary. In learning activities or instructional activities, usually teachers set learning objectives. As noted Jihad and Haris (2008: 14) that the achievement of learning outcomes is a form of behavioral changes that tend to settle on the cognitive, affective, and psychomotor of the learning process is done in a certain time.

The success of teaching can be seen in terms of a good learning process enables learning outcomes are good also. The learning result is a peak of the learning process. The learning result occurred thanks to teacher evaluation. Learning outcomes can be the impact of teaching and accompaniment impact. Both effects useful for teachers and students (Mudjiono and Dimyati, 2009: 20).

Natural science is a translation of words in the English language that is natural science, which means that the Natural Sciences. Connect with nature or have to do with nature, science means knowledge. In line with the opinion of Samatowa (2011: 3) who argued Natural Science or science that sense can be called as a natural science. The study of the events that occur in nature.

Rustaman (2011: 1.5) explained that the essence of science is a product, process and application (technology), including attitudes and values contained therein. Science products consisting of facts, concepts, principles, laws and theories can be achieved through the use of science process, namely through the methods of science or the scientific method (scientific methods), the scientific work (scientific inquiry).

Based on the above theory can be synthesized assessment of learning outcomes is the person's behavior change activities that include cognitive, affective, and / or psychomotor after performing certain learning activities that happened and are final.

1. Cooperative Learning Model Pair Checks Before studying the cooperative learning model checks first pair reviewing conventional learning. Conventional learning models (traditional) stresses the educator should be more active in providing information and material to students during the learning process takes place. This is corroborated by Djamarah and Zain (2013: 97) the conventional learning model is the traditional learning methods or collectively, the lecture method, because since this method first used as a means of oral communication between teachers and students in teaching and learning roses
2. Furthermore Kurniasih and sani (2015: 111) argue that the pair of checks is a learning model that emphasizes teamwork. Where each member of the group must have the ability to solve problems given.
3. The learning model pair checks besides training cooperation between partners can also train memory skills of students on the material that has been studied matching proposed by Sanjaya (2012: 13)

4. Based on the above theoretical studies can be synthesized that the model of cooperative learning model pair checks are paired learning model, in which each partner should have the skills to partner to communicate to solve problems well.

Cooperative learning model make a match a model of learning where students are invited to look for the pair while learning about a concept or topic in a pleasant atmosphere. (Kurniasih and Sani, 2015: 55)

While Suyanto (2009: 72) that the make and match the model is a model of learning in which teachers prepare a card containing questions or concerns and prepare a reply card and then the students looking for a partner card. Lorna Curran in Tampubolon (2014: 102) that the cooperative learning model make a match is a method of looking for a partner with a card game to understand a concept / material.

Based on some of the theories that have been studied can be synthesized a model of learning in the learning of students looking for a pair of cards that shared by the teacher at the beginning of the next lesson combines with some answers to questions or otherwise.

Research Method

This study will be conducted at the State Elementary School 07 Bojonggede Bogor regency. The time of this research will be implemented in the first semester of the 2015/2016 academic year. The population in this study are all fourth grade students in elementary school Bojonggede 07 totaling 93 students. The whole will be measured as the samples are therefore the entire population will be used in research.

The method used in this study is a quasi-experimental. Cook & Campbell (1979) suggested that research quasi experiment is an experimental method that has treatment (treatment), measurements of the impact (outcome measures), units of the experiment (experimental units), but do not use a placement at random (non-randomized) to creating a "difference or ratio" in order to conclude the changes caused by treatment (treatment).

Data collection techniques used in this study the learning outcomes in the form of objective multiple-choice test with 45 questions with four alternative answers that were previously tested for validity and reliability test items. Data were analyzed test scores are the result of students in natural science subjects are performed in sequence, as follows:

Scoring on a pretest and posttest to measure students' cognitive abilities.

1. Calculates scores N-Gain normalized.
2. Calculate the mean score and standard deviation (SD).
3. To test requirements analysis with normality test, homogeneity, and hypotheses.
   a. Normality test
   b. homogeneity test
   c. Hypothesis testing

Research Result

Description of the research results are grouped into three sections: data result of learning of Natural Sciences student group classes using cooperative learning model pair of checks, the data studied Natural Sciences student group classes using cooperative learning model make a match, and the data result of learning of Natural Sciences group classes using conventional learning models.

Learning Outcomes Data Subjects Natural Sciences through Cooperative Learning Model Pair Checks.

Based on data obtained before and after the students had learning students get learning by using cooperative learning model Pair Checks, then the calculation of the N-Gain to obtain a total score of a minimum of 51 and a maximum score of 92.

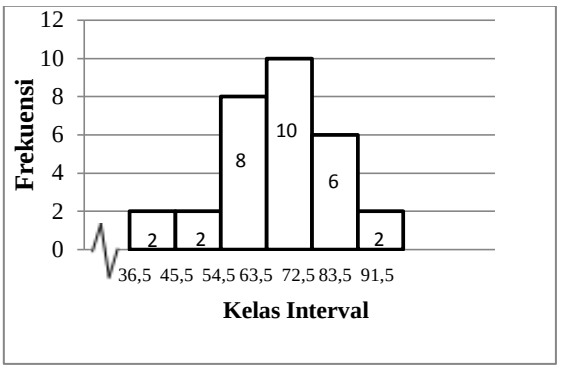

Figure 1 Histogram Results of Study Subjects Natural Sciences through Cooperative Learning Model Pair Checks

Learning Outcomes Data Subjects Natural Sciences through Cooperative Learning Model Make a Match.

Based on data obtained before and after the students had learning students get learning by using cooperative learning model make a match then the N-Gain calculation in order to obtain a total score of at least 59 and a maximum score of 88.

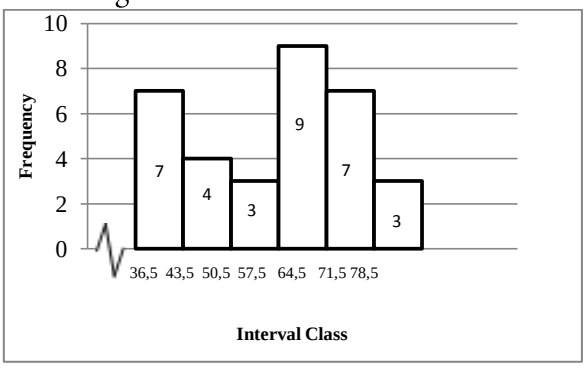

Figure 2 Histogram Results of Study Subjects Natural Sciences through Cooperative Learning Model

Cooperative Learning Pair Make a match

Learning Outcomes Data Subjects Natural Sciences through Conventional Model. Based on data obtained before and after students apply conventional learning models, then do the calculation to obtain the N-Gain Minimal total score of 51 and a maximum score of 70.

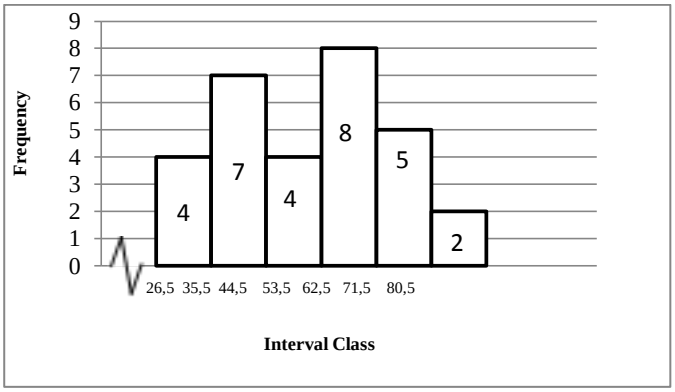

Figure 3. Histogram Results of Study Subjects Natural Sciences through Conventional Model

Differences in Learning Results Subjects Natural Sciences through Cooperative Learning Model Pair Checks, Cooperative Learning Model Make a Match, and Conventional Learning. Based on the data the average score pretest, posttest mean score and the average score obtained N-Gain Checks Pair class groups, group A Match Make classes and group classes conventional visible differences in each group classes. The average score of pretest each grade group showed differences that are not too much different, then the average score of N-Gain each grade group showed a relatively large difference.

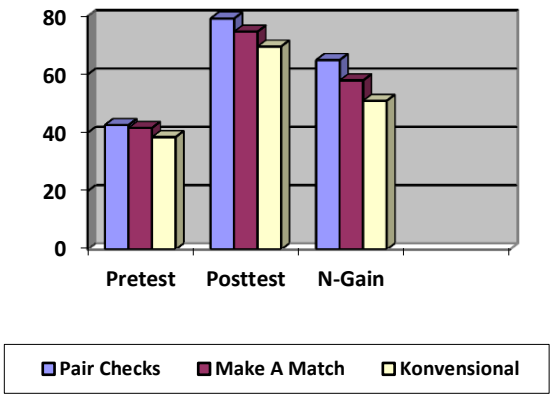

Figure 4 Histogram Difference Learning Results Subjects of Natural Science between groups checks Pair Class, Class Make a Match, and Class Conventional.

Discussion of Research

After testing instrument, it obtained 27 valid items. Then 27 valid questions that are used to question pretest and posttest in research.

Based on the research that has been done, it is known an average score of N-Gain science learning outcomes between the three classes of samples. Thus obtained difference in the average N-Gain result of learning science a significant between-class group pair checks with group control class, the class groups make a match with group control class, and the class group pair checks with class group make a match. Based on the average value of the N-Gain group experimental class pair checks and make a match that is successively 65 and 58 is higher than the average value of the N-Gain group control class is 51. After testing the hypothesis obtained that Ho is rejected so hypothesis Ha acceptable

alternative. It shows an increase in natural science learning outcomes for the use of the learning model in the experimental class compared with the results of natural science the control class.

As this study aims to determine differences in the results of learning science through cooperative learning model Pair checks and cooperative learning model of Make a Match, the following discussion will focus on the experimental class research experimental class checks and pair make a match. Based on the research results of studying natural science shows the average value of the N-Gain pair checks a class of 65 is greater than the average value of the N-Gain class group make a match equal to 58. After the t test average value of N-Gain the second group obtained t > t table is 2,422 > 1.99962.

This may indicate that there are differences in natural science learning outcomes through the use of cooperative learning models pair of checks and cooperative learning model make a match.

These results indicate an increase in natural science learning outcomes of the classes' pair the checks higher than with result studying natural science of the classes make a match. This is possible because the pair checks cooperative learning model is a model that invites students in pairs to play a role as a checker in answering and solving the given problem.

The use of cooperative learning model make a match also provides the opportunity for students to look for pairs of cards. More details of cooperative learning model make a match where student can foster the cooperation of students in answering questions by matching cards from a topic.

Conclusion

Based on the discussion of the results of research that has been done, be concluded that there are differences in the results of learning science through cooperative learning model pair checks and cooperative learning model make a match in Class IVA, IVB and IVC State Primary School Bojonggede 07Kabupaten Bogor semester of academic year 2015 / 2016.

1. Conclusion the above in accordance with the following results: There are differences in learning outcomes Natural Sciences. Through cooperative learning model Pair of checks and conventional learning models. It is seen from the value of N-Gain in the experimental group 1 (Pair learning model checks) by 65, while the control class (conventional learning models) to get the value of N-Gain of 51. Mastery learning results obtained experimental group 1 86.6 % whereas in the group control class is 56.6%. And the results of testing the hypothesis states that Ho is rejected and Ha accepted because tcount (4.519)> (2.00172).
2. There are differences in learning outcomes Natural science through cooperative learning model Make a match and conventional learning models. It can be seen from the results of the N-Gain in the experimental group 2 (cooperative learning model Make a match) is 58, while the control class (conventional learning models) to get the value of N-Gain of 51. Mastery learning results obtained by the experimental group 2 66.6% whereas in the group control class is 56.6%. And the results of testing the hypothesis states that Ho is rejected and Ha accepted because tcount (2,265)> (1.99962).

3. There are differences in learning outcomes Natural Sciences. Through the model pair of checks and learning model Make a match It is seen from the N-Gain in the experimental group 1 (the learning model Pair checks) by 65, while the experimental group 2 (cooperative learning model Make a match) to get the value of N-Gain by 58. Mastery learning outcomes obtained experimental group 1 (Pair learning model checks) amounted to 86, 6% of the control group experimental class 2 (cooperative learning model Make a match) amounted to 66, 6%. And the results of testing the hypothesis states that Ho is rejected and Ha accepted because tcount (2.4221)> (1.99962).

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Emotional Intelligence and Relationship with Self-Regulation of Biology Student Learning State of High School in Makassar

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ABSTRACT

The purpose of this study is (1) to determine the emotional intelligence of students of SMA in Makassar; (2) to determine the self-regulation for SMA students in Makassar; (3) to assess student learning outcomes SMA in Makassar; (4) to determine the relationship of emotional intelligence and learning outcomes SMA biology students in Makassar; (5) to determine the relationship of self-regulation by biology student learning outcomes SMA in Makassar; (6) to determine the relationship of emotional intelligence and self-regulation together with the results of high school students studying biology State in Makassar. This research was ex-post facto. The population in this study were all students of class XI IPA at SMAN in Makassar the academic year 2013/2014. The research sample as many as 221 students obtained by stratified random sampling technique. The variables studied were: (1) The independent variables consist of emotional intelligence with the symbols X1 and X2 regulation with symbols; and (2) the dependent variable is the result of studying biology with the symbol Y. data collecting technique by using a questionnaire to obtain a score of emotional intelligence and self-regulation, while the results obtained from the study of biological documentation biological value learning outcomes odd semester 2013/2014 academic year at high school students State 9 Makassar and SMA Negeri 1 Makassar. The results obtained show that (1) Emotional Intelligence SMA Negeri in Makassar in middle category (2) The student of SMA in Makassar in middle category (3) the results of studying biology students SMA in Makassar are in high category (4) emotional intelligence relates to learning outcomes SMA biology students in Makassar; (5) self-regulation relates to learning outcomes SMA biology students in Makassar; (6) regulation of emotional intelligence and jointly associated with learning outcomes SMA biology student in Makassar.

Key words: emotional intelligence, self-regulation, learning outcomes

Introduction

Education is a very important factor in improving the quality of human resources. Through education, is expected to give birth to human Indonesia who are competent in their field. Education is expected to help students to recognize the potential that exists within him, but not only was that education expected to be able to help students explore and develop their potential. So as to create humans Indonesia that faith and fear of God Almighty, noble, healthy, knowledgeable, skilled, creative, independent, and become citizens of a democratic and responsible as listed in the Law of the Republic of Indonesia No. 20 Year 2003 on National Education System.

Efforts to improve the quality of education cannot be separated from efforts to improve student learning outcomes in schools. Various attempts have been made to solve the problem of lack of student learning outcomes in schools, including curriculum improvement, application of

various models of learning so that students are able to achieve maximum learning results.

However, the reality indicates otherwise. Based on observations in some schools, there are still many students who have not attained the learning outcomes that correspond to a minimum completeness criteria (KKM) has been determined. There are still many students who have to follow after the implementation of remedial daily tests or repeat end of the semester. It shows that student learning outcomes is still relatively low.

Based on observations, in addition to the low learning another thing that attracts attention is the lack of emotional intelligence and self-regulation of students is still low. This is illustrated by the behavior of students in the school, among others, fights between students both inside and outside the school, some students play truant during school hours, often using mobile phones at the time of the lesson is in progress and the lack of attention of students in the workmanship of a given task.

Many factors affect the achievement of student learning outcomes. These factors are grouped into external factors and internal factors. External factors include the method of learning, teaching methods used by teachers, curriculum and so forth. Meanwhile, internal factors are factors originating from within the students include physical, psychological (intelligence, interests, talents, motives) and others.

Sometimes internal factors less the center of attention, the one that became the focus of attention is the external factors such as the models and methods used by teachers in teaching, whereas internal factors also have a very important role because it is the encouragement of the student themselves to achieve success, among others maximum learning results. Internal factors that play an important role, among others, emotional intelligence and self-regulation.

According to Goleman (1995), intelligence quotient (IQ) only accounted for 20% of our success, while 80% is the contribution factor other forces, such as emotional intelligence. Emotional intelligence plays a fairly important because with good emotional intelligence then, students can regulate their emotions to motivate and keep the spirit and pointed to something positive to achieve the desired goal, and remain optimistic if experiencing difficulties and obstacles.

Another factor contributing to the achievement of learning outcomes is self-regulation. Zimmerman (1990) tells of self-regulation emphasizes the importance of personal responsibility and control of knowledge and skills acquired.

Why self-regulation is important in achieving the maximum learning results because it is through self-regulation is good then the student is able to control the process of learning and understanding towards their duties as well as the motivation and decision-making. Given the many things that can lower the interest and motivation of students in learning and writing tasks, among so many other interesting things to do than study and do the task, among others, watch TV, play games, interact with friends through social media such electronic Facebook, twitter and others.

The research objective to be achieved is 1) to know the emotional intelligence of students of SMA in Makassar. 2) To determine the self-regulation of State high

school students in Makassar. 3) To know the biology student learning outcomes SMA in Makassar. 4) To know the emotional intelligence to learning outcomes SMA biology student in Makassar. 5) To determine the relationship between self-regulation by biology student learning outcomes SMA in Makassar. 6) To determine the relationship between emotional intelligence and self-regulation together with the results of high school students studying biology State in Makassar.

Research Methods

This type of research study is ex-post facto "correlation" since investigated the relationship between variables. Research conducted in high schools in the city of Makassar. all students in grade XI IPA at SMAN in Makassar the academic year 2013/2014 and the election sample stratified random sampling and selected two schools, namely SMA Negeri 9 Makassar representing national standard schools (SSN) and SMA Negeri 1 Makassar representing independent school category (SKM). Variable data collection techniques emotional intelligence and self-regulation by using instruments such as questionnaires, learning outcomes data obtained from the value of the first semester of the academic year 2013/2014 to use the documentation. Data were analyzed quantitatively analyzed, by using statistical techniques, both descriptive and inferential statistics.

Results and Discussion

Description of Data Analysis Results

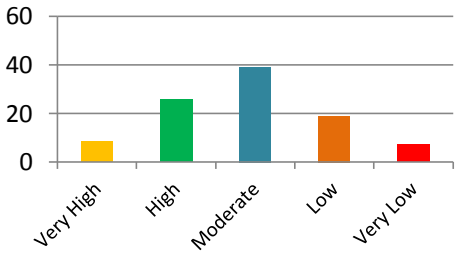
1. Description of Emotional Intelligence

Based on the results of research on emotional intelligence SMA students in Makassar can be seen in Table 1.

Table 1. Frequency and Percentage Distribution of Emotional Intelligence Senior High School Students in Makassar

Category	Score	Frequency	%
Very High	≥ 120	19	8,6
High	110 – 119	57	25,8
Moderate	100 – 109	87	39,36
Low	91 – 99	42	19
Very Low	≤ 89	16	7,24
Total		221	100

Emotional intelligence data obtained through the administration of the questionnaire respondents had scores range 79 - 127. The highest score obtained by the respondents was 127 and the lowest score obtained by the respondents was 79. The mean scores were obtained by respondents is 105. Based on the above table shows that the majority great emotional intelligence respondents are in the moderate category of 39.36% with a 100-109 score range. Here is presented a frequency histogram emotional intelligence of students of SMA in the city of Makassar.



Picture. 1 Histogram Percentage Emotional Intelligence Senior High School Students in Makassar

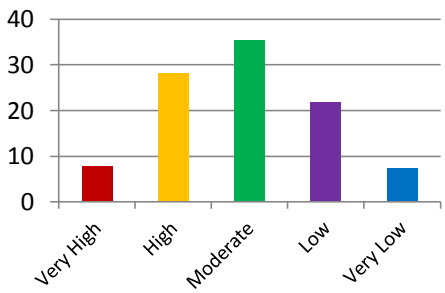
Self-regulation Description

Data obtained through the self-regulation of self-regulation on the administration of the questionnaire respondents. The questionnaire results of self-regulation has a score range of 69 - 138. The highest score obtained by the respondents was 138 and the lowest score obtained by the respondents was 69. The mean score obtained by the respondents is 105. For more information about the frequency distribution and percentage of students' emotional intelligence SMA in Makassar can be seen in Table 2.

Table 2. Frequency and Percentage Distribution of Self-Regulation of Foreign High School Students in Makassar

Category	Score	Frequency	%
Very High	≥ 127	17	7,69
High	113 – 126	62	28,05
Moderate	99 – 112	78	35,29
Low	84 – 98	48	21,72
Very Low	≤ 83	16	7,29
Total		221	100

Here is presented a frequency histogram of self-regulation of State high school students in the city of Makassar.



Picture. 2 Histogram Percentage of Self-Regulation of Foreign High School Students in Makassar

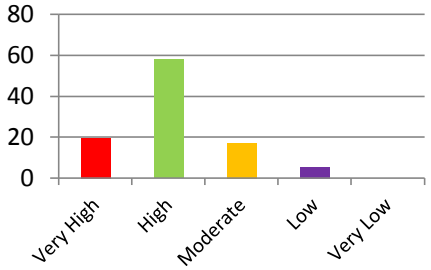
Description of Learning Result

Data obtained from the results of studying biology odd semester 2013/2014 academic year provided by the subject teachers of each school. The highest value obtained respondent is 94 and the lowest for respondents was 50. The mean value obtained by the respondents was 73. For more information about the frequency distribution and percentage of student learning outcomes SMA in Makassar can be seen in Table 4.5

Table. 3 Distribution Frequency and Percentage of Students' high schools in the city of Makassar

Category	Score	Frequency	%
Very High	85 – 100	43	19,5
High	65 – 84	128	57,9
Moderate	55 – 64	38	17,2
Low	35 – 54	12	5,4
Very Low	0 – 34	0	0
Total		221	100

Based on the above table shows that the learning outcomes of respondents are in the high category with a percentage of 57.9% with a range of grades 65 - 84. Here is presented a histogram percentage of student learning outcomes.



Senior High School in the city of Makassar.
Figure 4.5 Histogram Percentage of Students' high schools in the city of Makassar

Hypothesis Test

1. Emotional Intelligence Relationship with Learning Outcomes Biology

   Simple correlation analysis of the scores of emotional intelligence (X1) and score the results of studying Biology (Y) shows ry1 correlation coefficient of 0.38. The correlation coefficient test using the t test are presented in Table 4.

Table 4 Test Significant Correlation Coefficient ry1

Chopped Observation (df)	**Correlation Coefficient**	**t count**	**t table**	
			α = 0.05	α= 0.01
220	0.38	6.079	1.65	2.33

The above table shows that t = 6.079 is greater than t table at α = 0.05 and α = 0.01. This means that the strength of the relationship of emotional intelligence (X1) on learning outcomes (Y) is significant.

2. Self-Regulation Relationship with Learning Outcomes Biology

   Simple correlation analysis of the scores of self-regulation (X2) and score the results of studying biology (Y) shows the correlation coefficients ry2 amounted to 0,656. The correlation coefficient test using the t test are presented in Table 5 below.

Table 5 Significant Correlation Coefficient Test ry2

Chopped Observation (df)	Correlation Coefficient	t count	t table	
			α = 0.05	α= 0.01
220	0.656	12.867	1.65	2.33

The above table shows that t = 12.867 is greater than t table at α = 0.05 and α = 0.01. This means that the strength of the relationship of self-regulation (X2) on learning outcomes (Y) is significant.

3. Relationships Emotional Intelligence and Self-Regulation In Joint-deacon with Learning Outcomes Biology

Simple correlation analysis of the scores of self-regulation (X2) and score the results of studying biology (Y) shows the correlation coefficients ry1,2 amounted to 0,656. The correlation coefficient test using F are presented in the following table.

Table 6 Test Significant Correlation Coefficient ry1, 2

Chopped Observation (df)	Correlation Coefficient	t count	t table	
			α = 0.05	α= 0.01
220	0.656	82.534	3.04	4.71

The above table shows that F count = 82.534 is greater than f table at α = 0.05 and α = 0.01. This means that the strength of the relationship between emotional intelligence (X1) and self-regulation (X2) together with the learning outcomes (Y) is significant.

Discussion

1. Emotional Intelligence Relationship with Learning Outcomes Biology

The results showed that the level of emotional intelligence of students of SMA in Makassar based categorization by Slameto (1999) is in the category were as many as 87 out of 221 students with a percentage of 39.36%. Descriptive analysis results indicate that the average score of emotional intelligence of students is 105, where a score of the middle category. Emotional intelligence of students is good enough for 25.8% of students at the high category and 8.6% of students are at very high category. However, there are still 19% of students are in the lower categories and 7.24% of students are in the very low category.

The regression results indicate that the correlation between emotional intelligence and students' learning outcomes by 0.38. Referring to the interpretation of r values proposed by Arikunto (2005), the percentage is low. Emotional intelligence contributes 14.4% to the learning outcomes.

Data from this study also confirmed by other studies conducted by other David (2010) on the influence of emotional intelligence on student achievement techniques. The results show that emotional intelligence contributes 28.7% to the student achievement. The research result shows that student achievement is influenced by emotional intelligence, which is increasing emotional intelligence

is increasing learning achievements of students.

A person's success is not only determined by IQ alone. There are still many factors that influence the success of a person. According to Goleman (1995), intelligence quotient (IQ) only accounted for 20% of our success, while 80% is the contribution factor other forces, such as emotional intelligence or Emotional Quotient (EQ).

The same thing also expressed by Patton (2002) that emotional intelligence is the power behind the intellectual ability is the establishment of emotions that includes some skills, one of which is to motivate and keep the spirit of self-discipline in order to achieve objectives.

2. Self-Regulatory Relationship with Learning Outcomes Biology

The results showed that 78 of the 221 students were selected as sample or with the percentage of 35.29% had self-regulation in middle category is based on the categorization by Slameto (1999).

Regression results indicate that the correlation between self-regulation by the learning outcomes of students at 0,656. Referring to the interpretation of r values proposed by Arikunto (2005), the percentage is high. Meanwhile, self-regulation is also contributing 43.1% to the learning outcomes. It suggests that the self-regulatory factor in the learning process plays an important role.

It is also disclosed by Febrianela (2013) based on the results of self-regulation studies conducted in three different high school shows that the correlation between the self-regulation and academic achievement is at 82.3%, 56.7% and 61.5%. The results of the study illustrate that the higher scores of self-regulation, the high academic achievement and vice versa students with low self-regulation have low academic achievement. This can happen because of the high self-regulation, the student is able to choose different learning strategies for each subject with different difficulty levels so as to improve the students' academic achievement.

The results of another study conducted by the Latipah (2010) in her study of the research journal journals on different levels of education in the world shows that self-regulation in the field of education has a significant effect, especially for middle and high school students. Effect on the self-regulation of academic emotions that can eventually affecting an increasing academic achievement.

Zimmerman (1990) tells us that self-regulation emphasize the importance of personal responsibility and control of knowledge and skills acquired. Self-regulation in learning also takes students become masters (master / master) in the study.

Through self-regulation both students were able to establish their learning strategies. Where could their strategies vary depending on the subjects that they face because they know that each subject has different levels of difficulty and requires a different strategy? As disclosed Chamot (in Ellianawati 2009) of self-regulation is a situation where learners have control over the learning process through knowledge and application of appropriate strategies and understanding towards their duties.

3. Relationships Emotional Intelligence and Self-Regulation In Joint-deacon with Learning Outcomes Biology

The results of inferential data analysis using multiple linear regression test to test the third hypothesis on the relationship of

emotional intelligence and self-regulation together with the results of study showed that the correlation value is equal to 0,656 that goes into the high category. Meanwhile, the contribution of emotional intelligence and self-regulation of the learning outcomes is 43.1%.

The results of this research was supported by the theory put forward by Goleman (1995) that the intelligence quotient (IQ) only accounted for 20% of our success, while 80% is the contribution of other factors. Such factors may include emotional intelligence and self-regulation.

Good emotional intelligence and self-regulation backed by good students also will help students achieve in the learning process. Good emotional intelligence will assist students in developing relationships with his friends, not easily discouraged when experiencing stress, cares about the environment so that there was a good relationship with his friends, the process of exchanging information lessons will take place properly as well as with work on the assignment and other learning activities such as discussions and others. As expressed by Patton (2002) explains that a person who has a good emotional intelligence will have the skills to remain optimistic when faced with adversity and uncertainty, motivate and keep the spirit of self-discipline in order to achieve objectives.

Caruso (2004) says that emotional intelligence can help one to achieve success. Someone with good emotional intelligence can manage feelings of joy, contentment, or joy that can motivate themselves in the face of obstacles and when success does not come easily.

Likewise with good self-regulation, the student is able to manage its own way of learning, have the right strategy for himself at every lesson with different difficulty levels. Keep their mind to stay focused, which nowadays are so many things that can interfere with their learning process such as social media of diverse types. Either through self-regulation, students have their own way separately to complete the task and to confront the exam and manage their time between their learning tasks and opportunities with extra activities such as hobbies, activities with the surrounding environment as well as extracurricular activities at school. As described Zumbrunn (2011) that self-regulation is a process that helps students manage their thoughts, behaviors, and emotions in order to successfully navigate their learning experience.

In addition to emotional intelligence and self-regulation, we cannot forget that any other factors that influence the learning both external and internal factors. Based on the results of multiple linear regression analysis showed that the contribution of emotional intelligence and self-regulation of the learning outcomes is 43.1%.

Looking at data from the contribution of emotional intelligence and self-regulation that we should not forget that there are many other factors that influence the success or the achievement of students in the learning process.

Factors that affect learning outcomes as expressed by Slameto (2010) consists of internal factors and external factors. Internal factors include; physical factors, psychological and fatigue. While external factors can come from family, school and community environments.

Conclusion

Based on the results of research and discussion, the conclusions of this research are:

1. Emotional intelligence SMA students in Makassar middle category
2. Regulation of the students of SMA in Makassar middle category
3. The results of studying biology students SMA in Makassar at the high category
4. an emotional intelligence relates to learning outcomes SMA biology students in Makassar on low category
5. Regulation in relationship to learning outcomes SMA biology students in Makassar amounted at the high category
6. Emotional intelligence and self-regulation is jointly associated with learning outcomes SMA biology students in Makassar at the high category

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Language Studies & Literature:

Subtitled Films And Learning Listening Comprehension: A study in Bulukumba, Indonesia

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ABSTRACT

This present study is aimed at finding out (1) the possible effect of subtitled and non-subtitled movies on students' listening achievement, and (2) the difference between using subtitled and non-subtitled movies in students' listening comprehension. A Comparative study using two groups with a pre-test and post- test design was undertaken in this research. The data were collected using the IELTS listening test. There were two results in the data analysis of IELTS listening test. The first, a general improvement was noted. It was found that both procedures (presenting the movie with or without subtitles) produced a positive effect. Second, the result of movie task data analysis indicated a positive effect for both groups; both groups significantly improved during six weeks. It was revealed that subtitled group exercised a better performance than non-subtitled group.

Keywords: Subtitled movies; Non-subtitled movies; IELTS Listening Test.

Introduction

The teaching of listening has attracted a greater level of interest in recent years, more than it did in the past. University entrance exams, school examinations and other examinations now include a listening component, acknowledging that listening skills are a core component of foreign language proficiency.

Listening plays a significant role in the lives of people. It is evident that children listen and respond to language before they learn to talk. When it is time for children to learn to read, they still have to listen so that they gain knowledge and information needed to follow directions. In the classroom, students have to listen carefully and attentively to lectures and class discussions in order to understand and to retain the information for later recall. Clearly, much of the educational process is based on listening skills. Students have to spend most of the time listening to what the teacher says, for instance, giving lectures, asking questions, or giving directions. According to Coakley & Wolvin (1997), the amount of time that students are expected to listen in the classroom ranges from 42 to 57.5 percent of their communication time. Since listening occupies such a large percentage of the communication time of most people, it is therefore advantageous to possess effective listening skills in order to meet the listening demands that occur daily.

Despite the importance of the listening component in language instruction, English language classes in many countries still emphasize only the skills of reading and writing. This is especially the case of an English as a foreign language (EFL) situation in which the English language is

taught as a subject at school and used only inside, but not outside the classroom. EFL students are studying English in their home countries where English is not the dominant native language. Students who are from environments where English is not the language of the country have very few opportunities to hear the real language.

These students therefore are not accustomed to hearing the language as it is produced by native speakers for native speakers. Consequently, students from the countries in which English is taught as a foreign language frequently have great difficulty understanding the English spoken to them when they come into contact with native speakers of the language.

Movies can teach people about history, science, human behavior and other subjects. Movies that combine entertainment with instruction make the learning process more enjoyable. In all its forms, cinema is not only an art but also a business. Those who make motion pictures take great pride in their creation, but those creations also become important materials in teaching and learning process especially in English. Learning with movies plays a significant role in the proficiency of learners.

Most studies have proved that presenting movies when teaching listening can have a positive impact on listening comprehension achievement. But only few studies have examined the impact of using subtitles in movies to improve the listening comprehension skills of English language learners. Those few studies suggested that the use of movie subtitles could decrease the amount of new language acquired by language learning students.

Method

Participants

This study took place in the second year English class at a teacher's college, Sekolah Tinggi Keguruan dan Ilmu Pendidikan (STKIP) Muhammadiyah Bulukumba, Indonesia. The total number of participants in this study was forty students. In this research, the researcher selected one class from four classes at the same level. This class was selected as a research sample because the researcher had had one- year of teaching experience. The selected participants were assigned randomly into two groups: the group who watched a film with subtitles (the subtitled group) and the group who watched without subtitles (the non- subtitled group). Each group consisted of 20 students.

Research Design

The subtitled and non-subtitled groups were given a pre-test and a post-test. The pre-test was administered prior to viewing the film to assess their competence in listening comprehension. The post-test was administered to measure possible changes after viewing the film. The aim of this test was to find out the impact of using movies with and without subtitles on the students' listening comprehension levels. This design can be explained schematically, see below.

G1	O1	X1	O2
G2	O1	X2	O2

Figure 1. Research Design (Gay, et al., 2006)

Symbols:
G1: Subtitled Group
G2: Non-subtitled Group
O1: Pre-test
O2: Post-test
X1 : Treatment for subtitled group
X2 : Treatment for non-subtitled group

Research Instrument

The participants of this study first were tested using the listening sections of IELTS. This IELTS Listening test was designed to assess a wide range of listening skills, including how well the subject understood main ideas and specific factual information; recognized the opinions, attitudes and purpose of a speaker; and followed the development of an argument.

The test in this research was chosen by considering the students' competencies and the participation of the students who had never taken any kind of IELTS test before. There are four listening sections of IELTS. In section one and three, the students hear conversations, while in sections two and four, the students hear monologues. The test consists of six types of format: multiple choice, labeling (a plan, map or diagram), filling in a form, completing a table, completing a flow chart and giving short answers.

Procedure of Collecting Data

Before presenting the film, the researcher gave a pre-test and post-test to find out students' competencies in listening comprehension. The pre- and post-test were given to both the subtitled and non-subtitled groups. Both groups took four listening sections of IELTS as pre- and post-tests to measure the effects of movies with and without using subtitles. All the sections consisted of 41 questions. The students in both groups listened two conversations and orientation talks in the four listening sections of IELTS.

The researcher conducted the same experiment with both groups of students. The first group was taught by presenting movies with subtitles while the second group was taught using the same movies, but without presenting the subtitles. Each group was taught using those movies for six meetings. The researcher began the experiment by introducing the theme of the movies. In every meeting, before presenting the movies, the researcher started with a pre-viewing stage and finished the treatment with a post-viewing stage. Each movie was presented in one meeting, which involved three stages: pre-viewing, viewing, and post-viewing.

Table 1. Stages of Experiment

Subtitled Group	*Non-subtitled Group*
Previewing • Introducing the theme and the characters of the movie	Previewing • Introducing the theme and the characters of the movie • Familiarizing the words and phrases used in the movie
While viewing • Identifying the person who says the quotes in the movie • Identifying the scene in which each quote occurs • Predicting the end of the movie	While viewing • Identifying the person who says the quotes in the movie • Predicting the end of the movie
Post viewing • Verifying written result of students' prediction against actual ending • Examining students' understanding	Post viewing • Verifying written result of students' prediction against actual ending • Examining students' understanding

Results

Students' IELTS Test Achievement

The results of the mean scores and standard deviations of the IELTS test for the two groups during six weeks were calculated and are presented in the tables below. A subject was given one point for each correct answer, with the highest possible score being 41 and lowest possible being zero.

Pre-test

Table 2. The percentage and frequency of the students' pre-test score in subtitled and non-subtitled groups

Category / Skill Level	*Score*	*Subtitled Group*		*Non-Subtitled Group*	
		F	*%*	*F*	*%*
Expert	35-40	0	0	0	0
Very Good	30-34	0	0	0	0
Good	23-29	0	0	0	0
Competent	16-22	0	0	0	0
Modest	11-15	6	30	3	15
Limited	7-10	8	40	14	70
Extremely Limited	4-6	6	30	3	15
Intermittent	2-3	0	0	0	0
Have no ability	1	0	0	0	0
No score	0	0	0	0	0
Total		20	100	20	100

In Table 2, the results of the subtitled group pre-test show three skill levels. There are six students who have 5 to 6 points, which indicate an extremely limited skill level, 8 students who have 7 to 10 points, which indicate limited skill level, and 6 students who have 11 to 14 points, which indicate a modest level. The results of the

non-subtitled group pretest also shows three skill levels. There are three students who have 4 to 6 points, which indicate an extremely limited skill level, 14 students who have 7 to 10 points, which indicate a limited skill level, and three students who have 11 to 13 point which indicate a modest level. In this pretest calculation, both subtitled and non-subtitled group perform at three skill levels: extremely limited, limited and modest. It proves that in the pre-test both groups performed in the same classification range.

Table 3. The mean score and standard deviation of the students' pretest

Group	*Sample*	*Mean Score*	*Standard Deviation*
Subtitled Group	20	8.4	2.78
Non-Subtitled Group	20	8.9	2.13

The mean score of pretest for the subtitled group is 8.4 that is the limited skill level based on IELTS marking criteria. The non-subtitled group shows 8.9, also classified as the limited skill level. The mean score of then on-subtitled group is higher than the subtitled-group. The standard deviation of the non-subtitled group is lower than that of the subtitled group (2.13<2.78). In order to see the significant difference between pretest of both groups, a paired-sample t-test was run.

Table 4.Significance test of the subtitled and non-subtitled groups pretests

Variable	*T*	*A*
Pretest A – Pretest B	0.12	0.05

Table 4 shows that there is no significant difference between the pre-test of the subtitled group and the pre-test of non-subtitled group. It shows that level of significance is more than 0.05 (0.12 > 0.05). This result indicates that the pre-test of both groups statistically have the same result.

Post-test

Table 5. The percentage and frequency of the students' post-test score in subtitled and non-subtitled groups

Category / Skill Level	*Score*	*Subtitled Group*		*Non-Subtitled Group*	
		F	*%*	*F*	*%*
Expert	35-40	0	0	0	0
Very Good	30-34	0	0	0	0
Good	23-29	0	0	0	0
Competent	16-22	3	15	1	5
Modest	11-15	6	30	16	80
Limited	7-10	11	55	3	15
Extremely Limited	4-6	0	0	0	0
Intermittent	2-3	0	0	0	0
Have no ability	1	0	0	0	0
No score	0	0	0	0	0
Total		**20**	**100**	**20**	**100**

In Table 5, subtitled group post-test scores show three skill levels. There are 11 students who have 7 to 10 points which indicate a limited skill level, six students who have 11 to 14 points which indicate a modest skill level, and three students who

have 17 to 19 points which indicate a competent level.

The results of the non-subtitled group posttest also show three skill levels. There are three students who have 9 to 10 points, which indicate a limited skill level, 16 students who have 11 to 15 points, which indicate a modest skill level, and one student who has 17 points which indicate a competent level.

In this posttest calculation, the skill levels of the subtitled and non-subtitled groups increased one level higher than the pretest calculation. It is also revealed that both groups no longer had any member scored at the extremely limited skill level. It proves that both groups demonstrated positive improvement from the pre-test to post-test.

Table 6. The mean score and standard deviation of the students' post-tests

Group	*Sample*	*Mean Score*	*Standard Deviation*
Subtitled Group	20	10.9	3.55
Non-Subtitled Group	20	12.6	2.14

Table 6 shows that the mean score of the subtitled group is 10.9, which is the limited skill level. This indicates that the mean score of the subtitled group rose from 8.4 to 10.9. It shows an improvement of the mean score but that the group remains in the same category or skill level.

The mean score of the non-subtitled group post-test is 12.6, which is the modest skill level. In the non-subtitled group result, it can be seen that the mean score rose from 8.9 to 12.6. It indicates an improvement of the mean score from the limited to the modest skill level. This result actually did not indicate a positive effect because modest skill level is less than the standard of the good level in the IELTS marking criteria. In order to see the statistically significant difference between post-test results of both groups, a paired-sample t-test was run.

Table 7. Test of significance of students' posttest

Variable	*T*	*A*
Posttest A – Posttest B	0.00	0.05

Table 7 shows that level of significance is less than 0.05 (0.00 < 0.05). It indicates that there is a statistically significant difference between the post- test of the subtitled group and the non-subtitled group.

From the total average scores obtained by the groups, it can be seen that the mean score of the non-subtitled group (NSG) was substantially higher than subtitled group (SG). These results verified that students viewing movies without subtitles outperformed the students viewing movies with subtitles.

Test of Significance

In order to determine the differences between pre-test and post-test between two groups, a paired-samples t-test was run. The results of this test revealed that differences between the groups were significant.

Table 8. Paired-samples T-Test

Variable	*T*	*(α)*
Subtitled Group	0.00	0.05
Non-Subtitled Group	0.00	0.05

Table 8 illustrates the results of the comparison for the IELTS tests during the six weeks. It shows that the difference between the two levels of significance is less than 0.05 (0.00 & 0.00 < 0.05). As can be observed, there is a significant difference between the results of pre-test and post-test between the two groups.

Students' Movie Task Achievement

Table 9. The difference of mean score and standard deviation between subtitled and non-subtitled group in movie task

Movie Task	*Subtitled Group*		*Non-Subtitled Group*	
	Mean Score	*Standard Deviation*	*Mean Score*	*Standard Deviation*
Movie 1	8.65	2.96	5.9	2.77
Movie 2	11.3	1.78	8.3	2.27
Movie 3	16.3	2.47	11.7	1.69
Movie 4	17.5	2.33	12.25	1.62
Movie 5	17.45	1.5	12.8	3.05
Movie 6	10.95	1.15	10.05	1.23

Movie 1: We Bought a Zoo

The task consists of 19 items with the lowest possible score being 0 and the highest possible score 19. The mean score of the subtitled group is 8.65, while the non-subtitled group shows 5.9. This indicates that the mean score of the subtitled group is better than that of the Non-Subtitled group. These calculations indicate that the subtitled group had better results than the non-subtitled group.

Movie 2: The Odd Life of Timothy Green

The task consists of 20 items with the lowest possible score being 0 and the highest possible being 20. The mean score of the subtitled group is 11.3, while the non-subtitled group shows 8.3. It indicates that the mean score of the subtitled group is better than that of the non-subtitled group. In this task, the calculations indicate that the subtitled group had better results than the non-subtitled group.

Movie 3: National Treasure 2 (Book of Secrets)

The task consists of 21 items with the lowest possible score being 0 and the highest possible being 21. The mean score of the subtitled group is 16.3, while the non-subtitled group shows 11.7. It indicates that the mean score of subtitled group is better than that of the non-subtitled group. Again, the calculations indicate that the subtitled group had better results than the non-subtitled group.

Movie 4: The Day Earth Stood Still

The task consists of 21 items with the lowest possible score being 0 and the highest possible being 21. In this task, the mean score of the subtitled group is 17.5, while the non-subtitled group shows 12.25. It indicates that the mean score of the subtitled group is better than that of the non-subtitled group. These calculations indicate that the subtitled group had better results than the non-subtitled group.

Movie 5: Flight Plan
In this movie, the task consists of 19 items with the lowest possible score being 0 and the highest possible being 19. The mean score of the subtitled group is 17.45, while the non-subtitled group shows 12.8. It indicates that the mean score of the subtitled group is better than that of the non-subtitled group. These calculations also indicate that the subtitled group had better results than the non-subtitled group.

Movie 6: Man of Steel
The task of this movie consists of 12 items with the lowest possible score being 0 and the highest possible being 12. In this task, the mean score of the subtitled group is 10.95, while the non-subtitled group shows 10.05. It indicates that there is no significant difference between the mean score of the subtitled and non-subtitled groups. These calculations indicate that both the subtitled and non-subtitled groups have very good results.

The results of the data analysis of the six movie tasks indicate a positive effect for the subtitled and non-subtitled groups. Both groups significantly improved during 6 weeks. It was also revealed that the subtitled group demonstrated better results than the non-subtitled group. The subtitled group outperformed the non-subtitled group in 5 of the 6 movie tasks. In the last movie task, there was no significant difference between the subtitled and non-subtitled groups, but the results still showed that subtitled group performed better than non-subtitled group.

For the differences between the subtitled and non-subtitled groups, it can be concluded that general (IELTS listening test) and immediate (Movie tasks) progress show different levels of improvement between the subtitled and non-subtitled groups in learning listening comprehension.

Discussion

The researcher found two issues related to the possible effects of movie subtitling on listening comprehension. First, the immediate effect of both the subtitled and non-subtitled groups was taken into account. The result of the data analysis indicated a positive effect for both groups. It also revealed that the subtitled group performed better on the immediate comprehension than the non-subtitled group. Second, when it comes to the improvement of listening comprehension in general (the IELTS listening test), it was found that neither of the procedures (presenting the movie with or without subtitles) resulted in a better performance. Although, the data analysis of the IELTS listening test indicated that the non-subtitled group had a better mean score compared to the subtitled group, the improvement of the non-subtitled and subtitled groups both remained in the low to the mid-skill levels based on the IELTS marking criteria.

When it comes to the immediate effect of subtitling, the recent literature indicates a positive role in one way or the other. In line with Markham (1989), who studied the role of subtitles on comprehension enhancement, the present- research produced similar results for the listening test. Moreover, in agreement with Guillory (1999) and Huang & Eskey (1999–2000), the non-subtitled group came last when immediate comprehension was focused. All of the studies, which supported the use of subtitles, however, suffered from a major shortcoming. Those researchers neglected to test their subjects with a test, which was not subtitled, such as the IELTS listening

test, which is used- in the present study as a means to test the general listening improvement of the learners. This may explain the better performance of the non-subtitled group on the IELTS test, since they were used to receiving no support from subtitles during instruction using movies.

Conclusion

Presenting movies with and without subtitles in teaching listening comprehension was demonstrated to have a positive effect on the students' IELTS listening test achievement scores. The mean score of the non- subtitled group was substantially higher than the subtitled group. This test verified that the skill level of subtitled group stayed in same range of skill levels, while non-subtitled group increased its skill levels.

In terms of the difference in listening comprehension between subtitled and non-subtitled groups listening comprehension, movie task results showed a difference between subtitled and non-subtitled group achievement. The subtitled group performed better than the non-subtitled group.

It is suggested that a teacher or lecturer should present movies with or without subtitles to improve students' listening comprehension. In presenting movies to teach listening skills, it is suggested that it is better to use movies without subtitles rather than movies with subtitles in order to enhance the students' listening abilities.

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An Error Analysis on English Clauses Made by Students

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ABSTRACT

In this article, an error analysis is directed to inform what difficulties faced by the students in learning English and the types of errors are most decreased the students' English competence to employ subordinate clauses. This article informs the errors made by the students in using noun and adjective clauses and what types of errors are the most difficult for the students that hindered them to produce accurate and communicative complex sentences with noun and adjective clauses. Thirty eleventh grade students of MAN 2 Makassar were tested using three kinds of tests. In answering completion test, the errors identified were subordinate conjunction errors and relative pronoun errors which were categorized as misformation errors. In answering combining sentence test, the errors found were misformation and addition errors. In answering translation test, the errors recognized were misformation, omission, and disordering. The result of this research contributes in giving information to English teachers about the difficulties faced by the students in employing noun and adjective clauses and the types of errors that should be intensively given stressing in the teaching of English in class.

Keywords: error analysis, noun clause, adjective clause.

Introduction

Studying errors provide information for teachers and curriculum developer about the learners' difficulties in studying the target language and the types of errors which decreased most the learners' competence to use the target language (Dulay, Burt, and Krashen, 1982). The appearance of error in learner speech or writing has been a part of a foreign language learning process, at the same time error signals the learners' achievement on the target language. The study of students' errors can give information to the teachers about the errors that are mostly faced and the types of errors which have decreased the learners to use language for communication.

The teachers' acknowledgement on the students' error contribute to the clear instructions of the learning process done.

This error analysis provides information of errors found on the learners' subordinate conjunctions and relative pronouns, errors of misformation, omission, and misordering on the learners' noun and adjective clauses shown after combining and structuring two sentences into one complex sentence, and after translating Indonesian complex sentence into English complex sentence. Analysis on the learners' errors in using noun and adjective clauses shown through their answers on three kinds of tests renders a comprehensive description of the learners' target language achievement in using subordinate clauses.

The error analysis on the learners' noun and adjective clauses has been extensively done by many researchers (Lin and Chuang, 2014: Syarif, 2011; Baity, 2014: Zhao, 2015; Abdolmanafi and Rahmani, 2012: Xiaorong, 2007). Lin and Chuang

(2014) identified the errors of Taiwanese EFL learners in using relative clause. They use two different tests, similar with the type of tests used in this research, they are combining sentence and translation tests. Xiaorong (2007) identified the learners' errors in using relative clause by giving three kinds of task to elicit the learners' production data through a picture elicitation task, a sentence combination task, and a grammaticality judgment task. Abdolmanafi and Rahmani (2012) give sentence combination tests to identify the learners' errors of relative clause in the sentences produced. Zhao (2015) employed 50 questions consisted of single choices test, cloze test, correcting error test, and sentence combination test to identify English attributive clause. Baity (2014) used cloze test to identify the errors of SMA students in using noun clause. Syarif (2011) utilized multiple choice test in identifying the errors of Madrasah Aliyah students in using relative pronouns in complex sentence.

The previous researches on error analysis have been concentrated most on analyzing adjective clause. The errors are all elicited through answering tests or tasks. Most of them used one kind of test to identify the learners' errors. One research done by Zhao implemented four kinds of tests, one other research done by Abdolmanafi and Rahmani used three types of tests, and one other employed two types of tests. The purpose of the present study investigated is to analyze the errors made by the students in using noun clause and adjective clause and to find out the types of errors detracts most from a learners' ability to state ideas through the use of noun and adjective clauses. Three types of tests were used, they are cloze test, combination test, and translation test, to get a comprehensive description of the students' competence in using noun clause and adjective clause.

Specifically, this article examines the errors made by the students reflected by their answers in answering completion, combining sentence, and translation tests in using noun and adjective clauses. Through the description of errors, it is determined the types of errors detract most to the learners' ability to implement noun and adjective clauses.

Review of Related Literature

Errors are part of the student's Interlingua which a learner has at any stage of development, and are continually reshaped as he or she aims toward full mastery (Brown, 1980:170). Errors are the flawed side of learner speech or writing (Dulay, Burt, Krashen, 1982). Error analysis is the study of unacceptable forms produced by a learner in learning a foreign language (Crystal, 1992:125). Error analysis is a process on analyzing learners' errors with one clear objective (Sharme, 1982:21).

Analyzing errors concern with identifying cognitive process that underlie the learner's reconstruction of the new language (Dulay, Burt, Krashen, 1982: 150). Most common error classification is omission, addition, misordering misformation. Omission error refers to the absence of an item that must appear in a well-structured sentence. Addition error refers to the presence of an item which must not appear in a well-formed sentence. Addition error is the opposite of omission error. Misordering error is characterized by incorrect place of a morpheme or a group of morphemes in an utterance. Misformation error adverts the wrong form of a morpheme or structure (Dulay, Burt,

Krashen, 1982: 15-163). Some procedures in conducting error analysis are 1) determining the samples, 2) identifying error, 3) describing error, 4) explaining errors, 5) evaluating error Ellis (2008:46-57).

Analyzing errors in using noun and adjective clauses covers analyzing subordinate conjunction and relative pronouns, analyzing the formation and order of noun and adjective clauses in complex sentence. The analysis was done to the adjective clause or the dependent clause as well as to the noun clause or dependent clause of complex sentences. The error analysis was done to relative pronouns; *(who, whom, which, whose, and that)* or to the subordinate conjunction, such as; *when*, *where,* and *why.*

Research Method

This research employs a descriptive quantitative design which aims to describe the errors made by the students in implementing noun clause and adjective clause in complex sentences and to describe the types of errors which decrease most the students' competence in using subordinate clauses. The students' errors are described based on the percentage of error occurrence compared with the possible errors that may happen in each type of error.

The population was the eleventh grade students of MAN 2 Model Makassar in Academic Year 2015/2016. It consisted of ten classes. So, the number of the students were 400 students. The total samples used in this study were 30 students taken from one class. A purposive sampling technique was applied since the samples could only be taken from one class or only one class given by the principles to be investigated.

Three kinds of written tests were used as instruments to obtain data. The first test was completion test which was used to identify the errors made by the students in using subordinate conjunction and relative clause in complex sentences. The test consisted of fifteen numbers containing eight numbers of noun clauses and seven numbers of adjective clauses. The second test was combining sentence test which was used to distinguish the errors made in using subordinate conjunction and relative clause in complex sentences and to identify other type of error in constructing noun and adjective clauses. It consisted of ten numbers comprising four numbers of noun clauses and six numbers of adjective clauses. The third test was translation test which was employed to identify errors found on the students' translation. The errors identified were not only the flaws in using subordinate conjunction and relative pronouns but also any errors appeared in the students' sentence constructions in implementing noun and adjective clauses. This test consisted of five numbers, 4 numbers were noun clauses and 1 number were adjective clause.

Findings and Discussion

The errors in using noun and adjective clauses were identified through the answers given by the students in answering fifteen numbers of completion tests, ten numbers of combining sentence tests, and five numbers of translation tests. Description of students' errors was classified into errors in using noun clause and adjective clause.

Errors in Using Noun Clauses

In identifying the students' errors in using noun clause, they were identified through the use of completion test in which there is a space in each sentence that should be filled in with the right

subordinate conjunction. The errors were identified through the use of subordinate conjunction in completion test, namely, *what, why, why, who, whose* and *when* as well as the use of relative pronouns in combining sentence test, namely, *what, that, why,* and *how* as shown in Table 1. In combining sentence test, the errors were identified in the students' answers in combining two sentences into one complex sentence which contains noun clause. The errors were also identified in the answers given by answering translation test. Complex sentences in Indonesian language which consists of noun clauses are translated into English language (Table 2).

Table 1. Errors in Using Noun Clause in Answering Completion and Combining Sentence Tests

Types of Coordinate Conjunctions / ***Types Of Tests***	***WHAT (2)***	***WHY (2)***	***WHO (2)***	***WHOSE (1)***	***WHEN (1)***
Completion Test	7 (11.7%)	4 (6.7%)	7 (11.7)	18 (60%)	-
Types of Relative Pronouns / **Types Of Tests**	WHAT (1)	THAT (1)	WHY (1)	HOW (1)	
Combining sentence test	1(3.3%)	9 (30%)	3 (10%)	30 (100%)	

Table 1 informs that in answering completion test, the errors made by the students in using subordinate conjunction *what* are 11.7%, in using subordinate conjunction *why* are 6.7%, in using subordinate conjunction *who* are 11.7%, and in using subordinate conjunction *whose* are 60%. Based on the percentages of errors made, it explains that the most errors made by the students in using connector are *whose*, then following what, who and why. In using subordinate conjunction *when*, no student makes error. Based on the number of error made by the students, subordinate conjunction *whose* is the most difficult for the students to be implemented in complex sentence. The examples of errors made by the students in using the subordinate conjunction are as follows:

(1) Does he know *where** car this is? (Student 5)
The subordinate conjunction that should be put on the above sentence is whose.
Does he know *whose* car this is?

(2) She would like to know *when** time the flight arrived? (Student 7)
The subordinate conjunction that should be put on the above sentence is what.
She would like to know *what* time the flight arrived.

(3) He doesn't see *which** the lady in the black dress is. (Student 6)
The subordinate conjunction that should be put on the above sentence is who.
He doesn't see *who* the lady in the black dress is.

(4) Her mother can understand *which** she couldn't take the bus on time (Student 22).
The subordinate conjunction that should be put on the above sentence is why
Her mother can understand *why* she couldn't take the bus on time

Referring to Dulay, Burt, and Krashen (1982) who defines the misformation error as the use of wrong form of morpheme, the errors exemplified above can be categorized as misformation error because the students implemented wrong subordinate conjunction on the sentences given. The examples of using subordinate conjunction shows that errors made by the students are caused by lack of students' knowledge on the rule of placing subordinate conjunction in complex sentence.

In example 1, the student uses *where* instead of *whose*. Subordinate conjunction *where* is not correct to put in the sentence because *where* cannot make the meaning logically accepted in the sentence. In example 2. The student uses *when* instead of *what*. Subordinate conjunction *when* is not correct to put in the sentence because *what* is correctly matched with time to achieve logical meaning in the sentence. In example 3, the student uses *which* instead of *who*. Subordinate conjunction *which* is not matched with the lady because the lady (person) is matched with *who*. In example 4, the student uses *which* instead of why. Subordinate conjunction *which* is not correct because *which* is only appropriately used in adjective clause.

Table 1 also explains that in answering combining sentence test, the errors made by the students in using connector *that* are 30%, in using connector *why* are 10%, and in using connector *how* are 100%. No error is made by the students in using connector *what*. The percentages of errors shown in using how reflect that all students make errors in combining two sentences to be one complex sentence using how, while the percentage of errors in using *that* reflect that more than one third of the possible errors are made by the students. Examples of the students' errors in combining two sentences using *how, that,* and *why* are as follows:

(1) I cannot imagine *when** the mistake could have happened (Student 30).
The connector that should be put on the above sentence is *how*
I cannot imagine *how* the mistake could have happened.

(2) It is generally acknowledge *who** smoking can cause cancer (Student 21).
The connector that should be put on the above sentence is *that*
It is generally acknowledge *that* smoking can cause cancer

(3) I don't understand *that** the car is not running properly (Student 18).
The connector that should be put on the above sentence is *what*
I don't understand *why* the car is not running properly

The errors found on the examples above show that the students do not have enough knowledge on using subordinate conjunction. In combining sentence test, the errors found are just misformation errors since the two sentences do not need any change except the use of correct subordinate clause between the two sentences. In other words, in order to get a correct structure of a complex sentence containing noun clause, the students just combine directly the two sentences given with correct subordinate conjunction.

The errors made by the student through translating one complex sentence containing a noun clause in Indonesian language into English language were identified through the use of connector and other error types that appeared in the noun clauses found in the students' translation. Table 2 describes the errors

made by the students in using noun clause in answering translation test.

Table 2. Errors in Using Noun Clause in Answering Translation Test

Type of Errors / Type of Test	Connector error		misformation	Omission	Misordering
	WHAT	HOW			
Translation Test	1(0.83%)	-	15(12.5%)	8(6.7%)	36(30%)

Table 2 informs that in using connector in answering translation test, only one error is found that is in the use of connector *what* in the students' complex sentence. Further, this test required the students' grammatical competence in producing their own sentence in English, some errors were found in arranging the students' noun clauses, such as misformation (12.5%), omission (6.7%), and misordering (30%).

Misformation error was identified by the wrong form of the way noun clauses implemented while omission error was identified by the absence of an item that must appear in a well-formed sentence. Misordering errors were identified through the incorrect placement of morpheme or group morphemes in the students' noun clauses. Examples of students' errors on those types of errors are as follows:

Misformation error
Whatever what will you do it's up to you (student 26)

Correct answer is
How will you do it is up to you.

Omission Error
I like what he read (student 27)

Correct answer is
I like what he reads

Misordering error
I don't care what you will do (Student 17)

Correct answer is
I don't care what you will do

Translation test provides a wider chance for the students to show their competence in arranging a complex sentence. As a result, the errors made by the students are various. Misformation error made by the student 26 refers to the incorrect use of subordinate conjunction, and the incorrect structure of independent clause. Omission error made by the student 27 refers to the omission of –s on verb read which should have a concordance with subject *he*. Misordering error shown by the student 17 reflects the order of words that are not correctly structured as the rule of sentence structure in noun clause.

Errors in Using Adjective Clauses

The errors identified in using adjective clause were errors in using relative pronouns on the students' answers of the completion test, combining sentence test, and translation test. Other errors identified were addition error in answering combining sentence test as well as misformation and misordering errors in answering translation test.

Table 3. Errors in Using Adjective Clause in Answering Completion and Combining Sentence Tests

Types of connectors / Types Of Tests	WHICH (3)	WHO (3)	Where (1)
Completion Test	38 (42.2%)	16 (17.7%)	-
Types of connectors / Types Of Tests	***WHEN (1)***	***WHICH (1)***	***WHERE (4)***
Combining sentence test	1 (3.3%)	3 (10%)	19 (15.8%)

Table 3 states that 42.2% students made errors in using *which*, 17.7% in using *who*, and no error in using *where* on their answers on completion test. The errors made in answering combining sentence test are 3.3% in using *when*, 10% in using which, and 15.8% in using *where*. The errors of using relative pronoun *which* in answering completion test are higher than errors in answering combining sentence test but in using relative pronoun where, the errors in answering completion test were lower than in answering combining sentence test. Examples of errors made in Table 3 are as follows:

Errors of relative pronoun *which* and *who* in answering completion test

Error
I have two books *where** colors are red and green (Student 2).

Correct
Rel. Pronoun
I have two books *which* colors are red and green

Error
The girl *which** talked to me last night is my friend (Student 26).

Correct
Rel. Pronoun
The girl *who* talked to me last night is my friend

Errors of relative pronouns *when, which,* and *where* in answering combining sentence test

Error
Monday is the day *where** I was born (Student 8).

Correct
Rel. Pronoun
Monday is the day *when* I was born

Error
Do you know my book *when** I bought last week? (Student 26).

Correct
Rel. Pronoun
Do you know my book *which* I bought last week?

Error

I live in a dormitory *when** residents come from many countries (Student 16).

Correct
Rel. Pronoun
I live in a dormitory *where* residents come from many countries.

In employing relative pronoun in combining adjective clause with independent clause, a strict rule is followed such as the use of relative pronoun where should be preceded by a place, the employment of relative pronoun which is preceded by noun, while relative pronoun when is preceded by time. These rules are not followed by the students so that they make errors.

In combining two sentences to be one complex sentence with adjective clause, most students made addition errors in their adjective clauses. The errors made are shown in Table 4.

Table 4. Addition and Misformation Errors in Using Adjective Clause

Number of Test	Students' answers in combining sentence test	Total Students	Type of error
3.	Monday is the day when I was born on that day*	30 (100%)	addition
4.	Do you know my book which I bought it* last week?	28 (93.3%)	addition
5	Solo is the town where I studied there* in 1990.	29 (96.7%)	addition
4.	Do you know my book which I bought is* last week?	3 (10%)	Misformation

Error of addition made by the students explains that the students are lack of knowledge in combining sentences into one complex sentence with adjective clause. The students do not know that time, place, or noun is explained by adjective clause in the sentence. The errors occur because the time, place, or noun is mentioned again as shown in the sentences made by the students on numbers 3, 4, and 5. The addition errors made by the students should not be mentioned again in adjective clause because it has been represented by relative pronoun.

Misformation error made by 10 students above is caused by lack of knowledge in using to be is. The copula is should not be placed in that sentence.

In using adjective clause to answer translation test, the errors identified are misordering, misformation, omission, and the use of relative pronoun errors. These errors are found in Table 5.

Table 5. Errors in Using Adjective Clause in Answering Translation Test

Type of Errors / Type of Test	who	misordering	misformation	Omission
Translation Test	2(6.6%)	2(6.7%)	2(6.7%)	3(10%)

In Table 5, the only relative pronoun errors made by two students is who which is not as many errors as what are made by the students in using noun clause. The errors such as misordering, misformation, are just made by 2 students while omission errors are made by three students. Examples of errors made by the students in answering translation test are in the following.

Sentences Made by the Students	Error Types	Correct Form
I don't care. . . . will you do (Student 26)	. . . . .	What
	Misformation	I don't care what will you do
	Misordering	I don't care what you will do
I like what he read	Omission	I like what he read

Example above shows that student 26 does not use relative pronoun in his/her complex sentence. The correct relative pronoun for this sentence is what. Misformation error is made by structuring the adjective clause with the structure of question sentence. In this example, the student might think that the relative pronoun what has similar function with question word *what* which is followed by auxiliary then subject and verb. Omission error is made because the inflection *–s* that should be attached to verb when the subject of the sentence is *he* is omitted by the student.

Conclusion and Suggestion

The errors of using noun clauses are categorized into errors in using subordinate conjunction in completion test (6.7% to 60%), in combining sentence test (3.3% to 100%), and in translation test (0% - 0.83%). The most errors made are in using subordinate conjunction *whose* (60%) in completion test, in using subordinate conjunction *how* (100%) in combining sentence test, in using subordinate conjunction *what* (0.83%). Based on the percentages in doing errors, subordinate conjunctions *how* and *whose* are the most errors made by the students in using noun clause which influence most to the students competence in using noun clause.

The errors of using adjective clauses are categorized into errors in using subordinate conjunction in completion test (17.7% to 42.2%), in combining sentence test (3.3% to 15.8%), and in translation test (0% - 6.6%). The most errors made are in using relative pronoun *which* (42.2%) in completion test, in using subordinate conjunction *where* (15.8%) in combining sentence test, in using relative pronoun *who* (6.6%). Based on the percentages in doing errors, relative pronoun *which* is

error commonly made by the students which influences most to the students' competence in using adjective clause.

Errors in using subordinate conjunction in noun clause above are categorized as misformation errors. Other misformation errors (12.5%) refer to the incorrect form of noun clause implemented and two other types of errors are omission errors (6.7%) and misordering errors (30%) in translation test.

Errors in using subordinate conjunction in adjective clause above are categorized as misformation errors. Besides that, other misformation and addition errors are found in using adjective clause in combining sentence test answers. In answering translation test, the errors cover relative pronoun errors (6.6%), misordering errors (6.7%), misformation errors (6.7%), and omission errors (10%).

Since subordinate conjunctions how and whose in using noun clause and relative pronoun *which* in using adjective clause are the most errors made, the English teachers and students of SMA/MAN are suggested to give more attention to these in the teaching and learning of noun clause and adjective clause in classrooms. The limitations of this research are in the sampling technique which cannot be done through random sampling technique that the result might not represent all eleventh grade students of MAN 2 Model Makassaar in academic year 2015/2016.

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"EFL Students' Strategies in Overcoming Anxiety in Speaking English: A Qualitative Study of Freshmen Students of English Department, Muhammadiyah University of Makassar"

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ABSTRACT

The purpose of this study was to investigate EFL freshmen students' reasons of speaking anxiety and then to find out strategies used in overcoming their anxiety in speaking English. This research design was qualitative method. The researcher identified a research problem based on trends in the field or on the need to explain why something occurs. Described a trend means that the research problems could be answer best by a study in which the researcher saw to establish the overall tendency of responses from individuals and to note how this tendency varies among people. The instruments of this research were observation and interview. The participant of this research was the freshmen students of English Department in Muhammadiyah University of Makassar, the total participant involved in this research was 36 students. Based on the result of data analyses, it could be concluded that the students' reasons of speaking anxiety were lack of preparation, lack of vocabulary and the attention from the classmate. Based on the those reasons the students try to apply five strategies to overcome their anxiety in speaking English, namely preparation strategy, relaxation strategy, positive thinking strategy, peer seeking strategy, resignation strategy, nonverbal communication. Those strategies help the students' to deliver their opinion, in group discussion, and in individual presentation. However, the students were still need assistant to increase their pronunciation, speech content, and sentence structure, and self-confidence.

Keywords: strategy, anxiety, speaking, qualitative.

Introduction

One of the students' barriers in communication is anxiety. Anxiety is the distinct complex of self-perception, feeling, beliefs and behaviour related to the classroom learning arising from the uniqueness of the language learning process particularly in speaking English (Horwitz et al.1986: 128). Speaking in the foreign language is often cited by students as their most anxiety- producing experience" and also "difficulty in speaking in class is probably the most frequently cited concern of the anxious foreign language students seeking help at the learning skills Centre (Horwitz et al. 1986: 126).

For many learners, there is a genuine fear of performing foreign language. According to Cui (2011: 4) found that this paper has presented some findings of high school students' anxiety in Chinese EFL classroom. It was found that most students experienced anxiety in classrooms. Male students were found to have higher anxiety of English classes than females. Moreover, it also found that anxiety is a debilitator in language learning, especially anxiety of tests and English classes.

Some factors can hinder students' anxiety in performance and achievement and decrease their willingness to participate in learning activities particularly in speaking English. Anxiety has received the most attention as an important component of personality trait (Savile- Troike, 2006: 90). The statement indicates that the students with anxiety are likely to avoid such activities in which require them to speak because of fear of making mistake and over the risks when speaking English. Tseng (2012: 78- 82) states that there are four factors cause language anxiety in speaking English: self-perception, cultural differences, presentation in the classroom and fear of making mistakes. While, fear of negative evaluation, fear of speaking inaccurately and fear of being in public and shyness are the factors of language anxiety according to Zhiping & paramasivam (2013: 5- 6).

Because of many factors of language anxiety in classroom activity, there are such strategies that students' can use to overcome their anxiety in speaking English. Strategies are the behaviors and technique they adopt in their efforts to learn. Selection from among possible strategies is often a conscious choice on the part of learners, but it is strongly influenced by the nature of their motivation, cognitive style, and personality (Savile- Troike: 2006: 91). In addition, with use the strategies the students are expected to perform better in speaking in English by minimizing their anxiety and the teachers are expected to be able to reduce their students' anxiety in speaking English in the classroom.

Research Question

In relation to the background above, the research question of this research was "What strategies do students' apply in overcoming their anxiety in speaking English?

Concept of Anxiety

According to Horwizt (1986: 128) states that language anxiety is the distinct complex of self-perception, feeling, beliefs and behaviour related to the classroom learning arising from the uniqueness of the language learning process particularly in speaking English.

Horwizt (2001: 113) states that anxiety is the subjective feeling of tension, apprehension nervousness, and worry associated with an arousal of the autonomic nervous system. Horwizt (2001: 113) also states that anxiety has been found to interfere with many types of learning and has been one of the most highly examined variables in all of psychology and education.

Zeidner (1998: 17) Anxiety is a complex phenomenon and there has been wide disagreement about its' definition and criteria. Thus, anxiety has been variously conceptualized as a stimulus condition, as a probability of a harmful future outcome, and as response to a stressful condition.

In Second Language Acquisition research (SLA), anxiety has received the most attention with lack of anxiety as an important component of personality trait or self-confidence (Savile- Troike, 2006: 90). Anxiety correlates negatively with measures of second language proficiency including grades awarded in foreign language classes, meaning that higher anxiety tends to go with lower levels of success in learning. In addition, to self-confidence, lower anxiety may be manifested by more risk-taking or more adventuresome behaviors.

Savile-Troike (2006:90) we need to keep some complex issues in mind when we read about or interpret research in anxiety:

a. The direction of cause and effect is uncertain. Lower anxiety levels might very well facilitate language learning; conversely, however, more successful language learners might feel less anxious in situation of second language learning or foreign language learning, and thus be more self-confidence.
b. Instructional context or task influences anxiety level and reporting. For example, foreign language classes or tests which require oral performance normally generate more anxiety than do those in which production is in writing. Small- group performance generates less anxiety than whole- class activity.
c. Although personality factors are defined as individual traits, systematic cultural differences are found between groups and learners. For example, oral performance in English classes generates relatively more anxiety for Korean students than for Turkish students. This may be because of cultural differences in concept "face" or because of cultural differences in classroom practices and experiences.
d. Low anxiety and high self-confidence increase student motivation to learn, and make it more likely that they will use the second language or foreign language outside of the classroom setting. It is therefore not clear whether more successful learning is directly due to lower anxiety or to higher level of motivation and more social interaction.

1. Types of Anxiety

Zeidner (1998: 83) state that Spielberger's state- trait model of anxiety made the useful distinction between anxiety as a personality trait (A- Trait) and anxiety as a personality state (A- State).

a. State Anxiety

Zeidner (1998: 293) states that state anxiety is current research distinguished between the individual's actual experiences of anxiety in a specific situation.

According to the Spielberger in Zeidner (1983: 83) states that state anxiety refers to a transitory emotional state of tension and arousal determined by the interaction between a person's trait and present situation.

Spielberger also states that state anxiety refer to the specific level of anxiety experienced in a particular evaluative or test situation, such as an important college examination or athletic competition.

b. Trait Anxiety

Spielberger in Zeidner (1983: 83) states that trait anxiety refers to a stable disposition to react with anxiety across varying context.

According to Zeidner (1998: 293) states that trait anxiety is the individual's predisposition to have anxious experiences or engage in anxiety- provoking behaviors in a stressful situation.

Zeidner (1998:293) also states that trait anxiety is a relatively stable condition of the individual, best conceived as a latent disposition or probability to respond with elevated levels f state anxiety under stress. Trait

anxiety has also recently been shown to be a multidimensional construct which interacts with specific types of situational stress to influence the level of state anxiety experienced.

2. Test Anxiety

According to Zeidner (1998: 17) test anxiety as a scientific construct, refers to the set of phenomenological, psychological, and behavioral responses that accompany concern about possible negative consequences or failure on an exam or similar evaluative situation. Test anxious or anxiety students are characterized by a particularly low response threshold for anxiety in evaluative situations.

Horwizt (1986: 127) test anxiety refers to a type of performance anxiety stemming from a fear of failure. Test anxious students often put unrealistic demands on themselves and feel that anything less than a perfect test performance is a failure. Students who are test anxious in foreign language class probably experiences considerable difficulty since tests and quizzes are frequent and even the brightest and most prepare students often make errors.

Research Method

Research Design

This research design was qualitative method. The researcher identified a research problem based on trends in the field or on the need to explain why something occurs. Described a trend means that the research problems could be answer best by a study in which the researcher saw to establish the overall tendency of responses from individuals and to note how this tendency varies among people. The aims of this study were to investigate the causes of students' speaking anxiety and strategies used by the students' in overcoming their anxiety in speaking English.

Participant

The participant of this research was the freshmen students of English Department in Muhammadiyah University of Makassar., the total participant involved in this research was 36 students.

Instrument of the Research

The instruments of this research were observation and interview. It was used to find out what strategies do students applied in overcoming their anxiety in speaking English in the classroom.

Procedure of Collecting Data

Firstly, the researcher did observation in the speaking class. In this observation, the researcher noted all students' barriers in speaking presentation. Then, the researcher selected one of those barriers to make deep research. The focus of this research was students' anxiety. After that, the researcher interviewed the students to investigate students' reasons of speaking anxiety and they the interview was continued to know the strategies used in overcoming their anxiety in speaking English.

Technique of Data Analysis

The data from interview recorded through audio recording. It enables the researchers to keep the information safely (Creswell: 2012). The data also transcribed, categorized, and interpreted to answer research questions. There were steps in analyzing data through interview. First, transcribing the data based on the audio recording. Second, the researchers reduced inappropriate data, which are not relevant to the study. Afterwards, categorized the data into theme; strategies in overcoming students' anxiety.

Result

The result of the data analysis collected by using and questionnaire was presented in this part. Questionnaire conducted to find out the students' strategies in overcoming their anxiety in speaking English. The finding of the main problem is described as follows.

The interview data showed that most of the students felt anxiety in speaking because of some reasons. First, it was because the lack of preparation. When they got assignment to present the idea in the next meeting, the students did preparation one day before the presentation. So, it made the students looked badly in front of the class and they did a lot fillers and pauses. The voice of the speaker was heard nervous. Second, the lack of vocabulary. The students were difficult to arrange and construct the idea. Some of them did not mastery the grammar of the sentences. The idea of the speaker was difficult to be understood. The last was the students felt inconvenience of their classmates' eyes. The attention of their friends made the speaker thought that he/she have to do the best.

There were five strategies used by the students to overcoming their anxiety in speaking English, namely relaxation strategy, positive thinking strategy, peer seeking strategy and resignation strategy.

1. *Relaxation Strategy*

   Based on the interview data, one of the strategies used by the students was relaxation strategy. In overcoming students' anxiety in speaking, the students try to be calm, take a deep breath, and the students pretended to play with the hand. Even though, this strategy could not successful one hundred percent, but it could minimize student' anxiety in front of the classroom.

2. *Preparation Strategy*

   Beside relaxation strategy, the students also applied preparation strategy. The students' strategy was preparing their self-better before speak, try to make habit of studying English frequently, and the students study hard the day before the students speak English in the classroom. The students also made several reputations such as speak in front of the mirror and speak to the friend who wants to hear. Doing good preparation helped the students confident in speaking English.

3. *Positive Thinking*

   Positive thinking strategy also applied by the students to overcome their anxiety in speaking English. Positive thinking was the third strategy that the students used in overcoming their anxiety in speaking English after relaxation and preparation strategy. The students always think positively that the students are able to speak English, the students try to be confident when the students speak English, and the students imagine that they can give a great performance when the students speak English in the classroom.

4. *Peer Seeking*

   Peer seeking strategy was also strategy that students applied to overcome their anxiety in speaking English. The students tell their self that the others also feel anxious when speak English, the students tell their self that the difficult problems in speaking are also difficult to others, and the students try to talk with friend around them.

5. *Resignation*

   Resignation strategy was strategy that used to overcome students' anxiety in

speaking English, but this strategy was not popular in among the students. In this strategy, the students did not want to participate in the English class and the students prefer to be quiet because of fear of making mistakes when speak English.

6. *Nonverbal Communication*

In presenting students' idea, they also used gestures such as making movement of their hand and body. The gestures used were for minimizing the students' anxiety and to emphasis the point of the idea. However, the observation data indicated that some of the gestures used by the students were unnecessary. It was because the idea and gestures did not related to each other.

Discussion

Speaking anxiety in learning foreign language is a barrier experienced by the students in the classroom. In Second Language Acquisition research (SLA), anxiety has received the most attention with lack of anxiety as an important component of personality trait or self-confidence (Savile-Troike, 2006: 90). Anxiety correlates negatively with measures of second language proficiency including grades awarded in foreign language classes, meaning that higher anxiety tends to go with lower levels of success in learning. In addition, to self- confidence, lower anxiety may be manifested by more risk-taking or more adventuresome behaviour.

Based on the interview data, one of the strategies used by the students was called relaxation strategy. In overcoming students' anxiety in speaking, the students try to be calm, take a deep breath, and the students pretended to play with the hand the students showed their non-verbal communication in overcoming anxiety by playing their hands. Some of the girls' students looked playing her veil before starting to speak in front of the class. It was very clear, when the students were invited to give opinion, they starting speak by taking a deep breath, they were nervous, and used a lot hesitation. As Suleimenova (2013) found in his article that when students felt nervous they might have hesitated or stumbled or simply looked uncomfortable and became silent. In other words, anxious students feel a deep self-consciousness when asked to risk revealing themselves by speaking the foreign language in front of their peers. However, these problem disappeared only in a few minutes. Later the students looked calm in speaking.

Beside relaxation strategy, the students also applied preparation strategy. The students' strategy was preparing their self-better before speak, try to make habit of studying English frequently, and the students study hard the day before the students speak English in the classroom. Giving the topic a week or a day before speaking class begin was help the student to make good preparation at home. It is because the students have time to practice before presenting it. Mohammad and Nadhia (2015) state that there are various causes of anxiety, the first one is lack of preparation. Having preparation show the students were more confident and relax in speaking.

The next that the researcher called on students' strategy in overcoming anxiety is positive thinking strategy. Positive thinking was the third strategy that the students used in overcoming their anxiety in speaking English after relaxation and preparation strategy. The students always think positively that the students are able to speak English, the students try to be

confident when the students speak English, and the students imagine that they can give a great performance when the students speak English in the classroom. As students' answer on the interview that thinking positive could minimize their anxiety. Even though, the topic was difficult, but they believed the lecturer gave them appreciation what they have done.

Peer seeking strategy was also strategy that students applied to overcome their anxiety in speaking English. The students tell their self that the others also feel anxious when speak English, the students tell their self that the difficult problems in speaking are also difficult to others, and the students try to talk with friend around them. The students thought they were beginner students in learning English, so doing mistaken would not the problem at that time. It because the others also did the same things. The last strategy used by the students was resignation strategy was strategy that used to overcome students' anxiety in speaking English, but this strategy was not popular in among the students. In this strategy, the students did not want to participate in the English class and the students prefer to be quiet because of fear of making mistakes when speak English. In students' point of view be a quiet students could minimize their anxiety. However, in researcher's mind that is not a strategy to overcome the anxiety, because keep silent do not give ourselves to practice English. By doing a lot practice and speak in front of the friends give a chance to make it as habit, so it disappeared anxiety.

Conclusion

Based on the result of data analyses and finding in the previous section, the researcher concluded that the students applied five strategies to overcome their anxiety in speaking English, namely preparation strategy, relaxation strategy, positive thinking strategy, peer seeking strategy and resignation strategy. Those strategies help the students' to deliver their opinion, in group discussion, and in individual presentation. However, the students were still need assistant to increase their pronunciation, speech content, and sentence structure, and self-confidence.

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Investigating the Teaching Skills of High School English Teachers

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ABSTRACT

Teaching skills is a set of teachers' activities which foster learner to learn. Teaching skills involved in contributing to successful classroom practice can be identified in three skills: instructional planning skills, lesson presentation skills, and assessing learners' outcomes skills. This study aimed to find out the difference teaching skill and theoretical knowledge of teaching skills between certified and uncertified English teachers. Causal comparative design was used to investigate the certified and uncertified of Junior High School English teachers in Bantaeng District based on their scores from two standardized instruments. Study result indicated that there were no significant different teaching skills between certified and uncertified English teachers. It proved by the result which showed the probability value was higher than alpha (0.181> 0.05).In addition, the theoretical knowledge of teaching skills was revealed that there was no significant different knowledge between the certified and uncertified English teachers. Based on the findings, the researchers deduced that both certified and uncertified of High School English teachers in Bantaeng District have no significant difference in the teaching skills because of both English teachers have similar theoretical knowledge of teaching skills as the first of three important elements of teaching skills.

Keywords: Teaching Skills; Theoretical Knowledge; English Teachers.

Introduction

Teaching skills is a form of tutoring action. It is the accumulation of knowledge which has been obtaining by the teachers during they go through the education, both formal (university) and informal (teachers training) education. In general, there are some skills in teaching such as the skills to ask; skills to stimulate, reward, and punishment; skills of presenting the material, skills for classroom management, etc. (Risal, 2011).

In Indonesia, English is a foreign language (EFL) which does not have the status of English as an official language, but it becomes the primary language in the teaching of foreign language. The EFL status brings pedagogical implications for teachers and students. English teachers are required to have skills in teaching so that students can be actively involved in the learning process and motivated to learn English (Crystal, 2003).

As such, the application of the curriculum in 2013 which is currently the implementation of education policy in Indonesia requires teachers to have some skills in teaching to the achievement of objectives in the curriculum in 2013.The skills that are expected to have such as the skills to analyze the relationship between the Graduation Competency Standards (SKL), Core Competencies (KI), Basic Competency (KD), teachers book and students book; skills in writing lesson plan (RPP) with reference to the curriculum in2013; skills in using scientific approach in teaching correctly; skills by applying the

learning model of Problem Based Learning, Project Based Learning, and Discovery Learning; skills properly implement authentic assessment, and oral and written communication skills with a coherent, correct, and polite (Kementrian Pendidikan dan Kebudayaan, 2013).

Therefore, to improve teaching skills, of course this is related to how to improve the professionalism of teachers that will ultimately affect the quality of teaching and teachers as determinants of student learning success. Jalal et al. (2009) stated that the quality of good teachers can produce good quality students as well. On the contrary, poor teachers' quality can lead to poor students' achievement.

Based on the Act No. 14 of 2005 and Government Regulation No. 74 of 2008 mandates that teachers are required to have a minimum qualification of a bachelor (S-1) or Diploma (D-IV), master competencies (pedagogical, professional, social and personality), a certified educator, physical and spiritual health, as well as having the ability to achieve national education goals (Rustad, et al., 2012). However, with regard to the improvement of teachers' quality, the goals of the teachers' certification program still cannot be achieved maximally in general. This is caused by a principle problem of the teachers is still on in terms of their teaching skills and behaviors. In terms of teaching, most teachers are not nimble and creative as well as both unskilled in knowledge acquisition and learning methods. Thus, when teachers teach, they tend to be conservative and old- fashioned (Muhajir, 2014).

In Bantaeng, the fact from the result of Teachers Competence Test of 2013 (UKG 2013) showed that most of the English teachers (80%) in Bantaeng District have not been able to reach the competence in maximum level yet. They still have to join the Base Training and Follow-up Training. They are demanded to have more pedagogical competence especially skills, creative, and innovative in teaching English (Syafei, 2014).

Based on the elaboration above, the researchers proposes to investigate the teaching skills of High School English teachers in Bantaeng District."

Review of Related Literature

Previous of Related Research Findings

There are several researchers who have spent their effort in investigating the teachers competence related to the teaching skills. Mahmudah & Nisma (2013) conducted a mini project toward the certified and uncertified English teacher in classroom interaction strategy of two teachers. The result shown that there are different strategies used by both teachers.

The study of Soepriyatna (2012) reported the competence required by high school teachers of English in Indonesia (HSTEI) and described the development of performance tasks to assess competence. The findings showed that the responses fitted into three headings: English language competence, content knowledge, and teaching skills.

Ahmad & Setyaningsih (2012) investigated the teachers of Junior, Senior, and Vocational High School who joined the Teacher Professionalism Education and Training Program (PLPG). Statistically, it showed that the teachers professional in pedagogic side include their teaching skills belonged to medium level (69.7%).

Furthermore, based on the previous research findings above, the researchers comes to a conclusion that pedagogic

competence of the English teachers include their teaching skills is very important to have because it dealings with the teachers ability to transfer the knowledge in effective teaching techniques adapted to their own classroom contexts. Therefore, the researchers considers that the English teachers need to aware their competence especially on their teaching skills so that they always ready to enhance it in creating an effective teaching learning process.

Some Pertinent Ideas

Teaching Skills and the Element of Teaching Skills

Skill is an acquired ability to perform an activity well, usually one that is made up of a number of coordinated processes and actions (Richard & Schmidt, 2010). While, DeQueliy and Gazali (quoted by Slameto, 2010) define teaching is invest knowledge to someone briefly and appropriately. Howard (quoted by Slameto, 2010) argues that teaching is an activity to help and guide someone to get, change, and develop his or her skills, attitudes, ideals, appreciations, and knowledge. To be effective in teaching, an EFL teacher is, like other subject teachers, required to possess a repertoire of teaching skills (Rasyid, 2012).

Kyriacou (2007) stated that there are three essential elements of teaching skills. Knowledge, comprising the teacher's knowledge about the subject, pupils, curriculum, teaching methods, the influence on teaching and learning of other factors, and knowledge about one's own teaching skills. Decision-making, comprising the thinking and decision-making hat occurs before, during and after a lesson, concerning how best to achieve the educational outcomes intended. Action, compressing overt behaviour by teachers undertaken to foster pupil learning.

Classification of Teaching Skills

Generally, teaching process comprises three basic steps, planning instruction, delivering the planning instruction, and assessing the learners' outcomes (Grant, Hindman, Stronge, 2013). Notice that, to carry out the teaching process, the three steps should be aligned with one another. The planned instruction should be logically related to the actual instruction and the assessments should relate to the plans and instruction.

Instructional Planning Skills

The meaning of the instructional planning is the teachers' prediction on the learners' activities as long as the teaching process take place (Sa'ud, 2009). Planning and preparing instruction process is important activities for teachers. The instructional planning helps teachers allocate instructional time, select appropriate activities, link individual lessons to the overall unit or curriculum, sequence activities to be presented to students, set the pace of instruction, determine the homework assignment, and identify techniques to assess students' learning outcomes (Grant, Hindman, & Stronge, 2013).

Based on the description above, the researchers decides that instructional planning skills consist of four indicators, those are: a) objectives, b) course content and method, c) instructional activities, d) assessment.

Lesson Presentation Skills

The professional teachers are who accomplish the lesson well. So that, they

are required to have several skills in presenting the lesson effectively and efficiently, those are: (a) opening-close the lesson skills, (b) explaining skills, (c) questioning skills, (d) reinforcing skills, (e) using media skills, (f) guide a small discussion skills, (g) classroom management skills, (h) conduct a variation skills, and (i) teaching individual and group skills (Sa'ud, 2009). While Alma, et al. (2009) listed five skills in teaching process which are more feasible by a novice teachers, those are: set induction, explaining, questioning, reinforcement, and closing procedures.

Based on the elaboration above, the researchers concludes that the indicators of lesson presentation skills are: a) set induction, b) explaining, c) questioning, d) conduct a variation activities, e) reinforcing, f) closing.

Assessing the Learners' Outcomes

All teachers have to be able to assess the learners' outcomes refer to the goal. There are two ways that the teachers can be used: illuminative-observative and structural-objective. Illuminative-observative is the way to assess the learners' outcomes by observing the learners changes and outcomes continuously, either during or after the lesson is thorough. Structural-objective is related to the way of giving score, grade, and value of the learners' outcomes (Sa'ud, 2009).

Based on the elaboration above, the researchers concludes that the indicators of lesson presentation skills are illuminative-observative include diagnostic, formative, and summative purposes of assessment; and structural-objectives.

The Development of Teaching Skills

The teachers develop their teaching skills by looking at the efforts of experienced teachers to monitor and develop their own skills or to assist with developing those of colleagues. Studies reporting the efforts of experienced teachers to develop their teaching skills well illustrate that all teachers, not just beginning teachers, are continually in such development. Indeed, this is the sense that teaching skills continually need development to meet new demands that makes teaching such a challenging profession (Kyriacou, 2007).

Perrott (quoted by Kyriacou, 2007) analyzes on how teaching skills are acquired and developed. It focuses on three stages. The first stage is cognitive and involves developing awareness; by study and observation, of what the skills is; identifying the various elements of the skills and their sequencing, knowing the purpose of using the skills, and knowing how it will benefit the teaching process are also part of first stage. Addition, she identifies the second stage as practice, normally in the classroom, but occasionally in a controlled setting as part of a training course in which there is a short practice of a specific skill. The third stage is feedback which enables the teachers to improve the performance of the skill by evaluating the relative success of its performance.

Professional Teacher and the Competence

Professionals refer to two things, namely people who have a profession and appearance of a person in doing his job according to his profession. Teacher is those persons who consciously direct the experiences and behavior of an individual so that education takes places (Grambs and Clare cited by Uno 2010). While Uno (2010) himself defines teachers as adults who consciously take responsibility for educating, teaching, and

guiding students. The person who called teacher is a person who has the ability to design learning programs and be able to organize and manage the classroom so that learner can learn and can eventually reach the level of maturity as the ultimate goal of the educational process.

The Act No. 14 of 2005 on Teachers and Lecturers article 10 paragraph 1 stated that educator's competence as agents of learning in elementary, secondary, and early childhood education include:

1. Pedagogical competence as the ability to provide the best possible service, which means prioritizing the value of material objects (Satori, 2012). Vembrianto, et al. (quoted by Alma, et al., 2009) elaborate pedagogical competence is the competence in managing teaching and learning process. It covers the concept of teaching preparedness which shown by mastering the knowledge and having teaching skills.
2. Personality competence related to the performance of the teacher as the individual who has discipline, good appearance, responsibility, commitment, and be a model. Personality competence include: (1) developing the personality; (2) interactive and communicative; (3) conduct the guidance (Usman quoted by Sagala, 2009).
3. The teacher's social competence show the social communication skills, both to his students and friends with fellow teachers, and principals even with the wider community (Satori, 2012). Uno (2012) Social competence is owned by a teacher in the ability to communicate with learners and their environments (such as parents, neighbors, and peers).
4. Professional competence means the teacher has a broad knowledge of the subject that will be taught and mastery in the sense of methodological knowledge of theoretical concepts is able to have the right methods and be able to use a variety of methods in teaching and learning (Satori, 2012).

Research Method

Research Design

Causal comparative design was suitable to be employed. In causal comparative, the researchers attempted to determine the cause or reason for existing differences in the behavior or status of groups of individuals. The basic causal-comparative design involved selecting two groups differing on some independent variable and comparing them on some dependent variable (Gay, Mills, & Airasian, 2006).

Population and Sample

The population of the study is the English teachers of secondary level in Bantaeng District. They are certified and uncertified who teach in Junior High School which cover 56 teachers. In this study, the researchers use over sampling technique to determine the sample. Over sampling technique is the way to determine sample by taking all of number of population (Sugiono, 2002). This technique is used if the number of population less than 30 participants.

Instruments

Questionnaire

The questionnaire consists of four parts: a cover letter, closed-ended questions asking respondents about their background, rating scales addressing teaching skills performance which was consisted of 24 statements, and closing instructions thanking the respondent for taking part in the study.

Test

Test was used to asses and examine the theoretical knowledge of certified and uncertified of High School English teachers. Test was built in multiple choice form which was consisted of 24 questions. The researchers gave tests to found out the theoretical knowledge of certified and uncertified of High School English teachers as the basic element in applying the teaching skills.

Procedure of Data Collection

In collecting the data, the researchers goes through some steps, distributing the questionnaire and filling out the questionnaire and test.

Technique of Data Analysis

Questionnaire

The rating scale scoring is carried out in the different place to be processed. This questionnaire consists of two attributes, favorable (F) and unfavorable (UF). One of the response forms that are usually used is five-choice form. In this study, the researchers use form of 1= always, 2 = almost always, 3 = about half the time, 4 = rarely, and 5 = never.

The data are analyzed by using inferential statistics. The inferential statistics are analysis of variance which used to determine if there is significant difference among the means of two groups (Gay, Mills, & Airasian, 2006). The technique of the data analysis will be analyzed by using computer program is named SPSS 18.0, for windows.

Test

Converting the teachers' score by using the following formula:

$$\text{Teachers' score} = \frac{teachers' score}{maximum\ score\ (24)} X\ 10$$

Findings and Discussion

Findings

In this section, the researchers described the result of data analysis based on the problem statement. The result described the teaching skills of certified and uncertified English teachers and the theoretical knowledge of certified and uncertified English teachers could be seen clearly in the following explanation.

The Teaching Skills of Certified and Uncertified English Teachers

The Description of Frequency and Percentage of the Certified and Uncertified English Teachers' Teaching Skills

The result of the study through the distribution score of certified and non-certified English teachers indicated that most of certified English teachers who teach in Junior High School level were having good and fairly good teaching skills. It showed that there were 20 certified English teachers or 68.97% who have good teaching skills, 9 certified English teachers or 31.03% who have fairly good teaching skills. Whereas, for the uncertified English teachers in table 3.1 showed that there were 14 uncertified English teachers or 51.85% who have good teaching skills, 13 uncertified English teachers or 48.15% who have fairly good teaching skills.

Moreover, based on statistics test in probability value (significant 2-tailed), the probability was higher than alpha (0.181 > 0.05). It means that Ha is rejected and H0

is accepted. It means that the teaching skills of certified and uncertified English teachers were not significantly different.

The Theoretical Knowledge of Teaching Skills of Certified and Uncertified English Teachers

The Frequency and Percentage Description of the Certified and Uncertified English Teachers' Theoretical Knowledge of Teaching Skills

The result of the certified and uncertified English teachers' theoretical knowledge of teaching skills was gained from participants' score in theoretical knowledge test that have been constructed by the researchers. The result illustrated that there were 1 or 3.45% certified English teachers who have excellent theoretical knowledge of teaching skills, 1 or 3.7% certified English teachers who have very good theoretical knowledge of teaching skills, 6 or 20.69% certified English teachers who have good theoretical knowledge of teaching skills, 4 or 13.79% certified English teachers who have fairly good theoretical knowledge of teaching skills, 6 or 20.69% certified English teachers who have poor theoretical knowledge of teaching skills. Whereas, for the uncertified English teachers in table 4.7 showed that there were 1 uncertified English teachers or 3.70% who have excellent theoretical knowledge of teaching skills, 7 or 25.93% uncertified English teachers who have very good theoretical knowledge of teaching skills, 8 or 29.63% uncertified English teachers who have good theoretical knowledge of teaching skills, 4 uncertified English teachers or 14.81% who have fairly good theoretical knowledge of teaching skills, and 7 or 25.93% uncertified English teachers who have poor theoretical knowledge of teaching skills.

In statistical hypothesis was based on statistics test in probability value (significant 2-tailed), the probability was higher than alpha (0.481 > 0.05). It means that Ha is rejected and H0 is accepted. It means that the teaching skills of certified and uncertified English teachers were not significantly different.

Discussion

The Teaching Skills of Certified and Uncertified English Teachers

Based on findings above, it showed that the teaching skills of certified and uncertified English teachers in Bantaeng District were different. In the frequency and rate percentage of both certified and uncertified English teachers, the researchers found that most of certified English teachers who teach in Junior High School were having good and fairly good teaching skills. It means that the certified English teachers were have more ability to perform teaching activity effectively in helping the learners to get, change, and develop their skills, attitudes, ideals, appreciations, and knowledge.

This finding was in line with the Act No. 14 of 2005 and Government Regulation No. 74 of 2008 mandates that teachers are required to have a minimum qualification of a Scholar (S-1) or Diploma (D-IV), master competencies (pedagogical, professional, social and personality), a certified educator, physical and spiritual health, as well as having the ability to achieve national education goals (Rustad, et al., 2012).

Although the frequency result showed that there was difference teaching skills between certified and uncertified English teachers, but the result of data analysis by using independent sample t-test showed

that there was no significant difference between both certified and uncertified English teachers. The result showed the probability value was higher than alpha (0.181 > 0.05).

Therefore, H0 (there was no statistically significant difference in teaching skills between the certified and uncertified English teachers) was accepted. It can be deduced that there was a resemblance teaching skills for both certified and uncertified English teachers. These findings can occur because of the theoretical knowledge of teaching skills possessed by certified and uncertified of Junior High School English teachers that will be illustrated below.

The Theoretical Knowledge of Teaching Skills of Certified and Uncertified English Teachers

The result of theoretical knowledge of teaching skills of certified and uncertified English teachers showed that the probability value was higher than alpha (0.481 > 0.05). It means that Ha is rejected and H0 is accepted. It means that the teaching skills of certified and uncertified English teachers were not significantly different.

Kyriacou (2007) stated that there are three important elements of teaching skills; theoretical knowledge of teaching skills related to the teachers knowledge about subject matter, students, curriculum, teaching method, and knowledge about the teaching skills itself. Kyriacou (2007) explained that knowledge, decision-making, and action is three important elements in teaching skills. Knowledge about teaching skills in which applied in action based on a decision that have been made first is the linier process in teaching skills. So, if the result found that the teaching skills of certified and uncertified English teachers were not significantly different, it caused by the theoretical knowledge of teaching skills of both certified and uncertified English teachers were not significantly different.

Based on the findings and discussion above, the researchers conclude that there are no significantly different teaching skills between certified and uncertified of High Schools English teachers in Bantaeng District. It can be happened because of there is no significantly different theoretical knowledge owned by both certified and uncertified English teachers as the first important element in teaching skills that should be applied linearly.

Conclusions

This study shows the result on the teaching skills of certified and uncertified English teachers. Based on the findings, it can be concluded that:

1. By seeing the means score of teaching skills both certified and uncertified English teachers, the result showed that the mean score of certified English teachers was higher than the mean score of uncertified English teachers (75.48 > 73.41). It means that the teaching skills of certified was higher than uncertified English teachers. But, the result of t-test analysis showed that there was no significantly difference between both of them (p = 0.181 > 0.05).
2. By seeing the means score of the theoretical knowledge of teaching skills of certified and uncertified English teachers, the result showed that the mean score of certified English teachers was higher than the mean score of uncertified English teachers (6.83 > 6.59). It means that the theoretical knowledge of teaching skills of certified was higher than uncertified English

teachers. But, the result of t-test analysis showed that there was no significantly difference between both of them (p = 0.481 > 0.05).

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The Process and Circumstance in Instructional Material "English Module for MKWU"

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ABSTRACT

The paper describes how the clause representing patterns of experience with using the Systemic functional Linguistics (LFS) approach. The purpose of this research is to know how the process of transitivity system and to know the element of language is used the instructional material in English for MKWU of English Department of Borneo University Tarakan Academic Year 2015. The design of this research is Descriptive Qualitative. In this research will use instructional material. The data will be collected from English Department of Borneo University Tarakan in "English for MKWU" class. There were six types of process in 182 clauses. The result of data analysis showed that the numbers in types of process were: material (47, 01%), relational (30, 57%), behavioral (9, 28%), mental (8, 68%), verbal (2, 99%), and existential (1, 50%). The most dominant process types used is Material process. It's mean that many reading passages in English module for MKWU contain action or happened physically. *This is not also relevant to the competence promoted by the module, which is* communicative and meaningfully. And the last, *some competencies revealed in the module have not been implemented well based on transitivity system, theories of and intermediated learners.*

Keywords: Transitivity System, Systemic Functional Linguistics, instructional material, English for MKWU.

Introduction

A phrase is any group of related words that, unlike a sentence, has no subject-predicate combination. The words in phrase act together so that the phrase itself functions as a single part of speech. (Reinhardt, 2011: 55). Like a phrase, a clause is a group of related words but unlike a phrase, a clause has a subject and predicate. An independent clause, along with having a subject and predicate, expresses a complete thought and can stand alone as a sentence. On the contrary, dependent clause does not express a complete thought and therefore is not a sentence (2011:59).

A clause is a group of words including a subject and verb forming part of sentence (Hicks, 2007:20). And according Halliday (1985:53) a clause is the product of three simultaneous semantic processes. It is at one and the same time a representation of experience (ideational), an interactive exchange (interpersonal) and a message (textual).

Generally, the study of language could be cluster in two perspectives; they are formal linguistics and functional linguistics. Formal linguistics primarily concerned with formal structures, such as phonemes or sentence. Functional linguistics is focused on deriving grammatical, syntactic and contextual structures from the ways in which language is used. Related to why and how the language is used. In the perspective of Systemic Functional Linguistics (SFL) language is a system of meanings and other system (i.e. Systems and forms of expression) to realize the meaning of.

Traditionally, transitivity is normally understood as the grammatical feature, which indicates if a verb takes a direct object: and we know some of the terms below: (a) if the verb takes a direct object, then it is described as transitive, and (b) it is called intransitive if it does not; (c) an extension of this concept is the transitive verb, which takes both a direct and indirect object. Halliday, found the new concept of transitivity. The new concept represents a further development of the old concept. There are three components of what Halliday calls a "transitivity Process", namely: (a) The Process itself, (b) participants in the process; and (c) circumstances associated with the process. Then, Halliday divides the system of transitivity or process types into six processes, namely: material, mental, relational, behavioral, verbal and existential.

This research is a discourse analysis using Systemic Functional Linguistics approach developed by Halliday's. A text is unit of language in a social context. It is not a grammatical unit, like a clause or a sentence; and it is not defined by its size. A text is best regarded as a semantic unit; a unit not of form but of meaning (Halliday and Hasan1976:2). According to Halliday, text is a sign representation of a socio-cultural event embedded in a context of situation is the semi-socio-cultural. Text and context are so intimately related that neither concept can be comprehended in the absence of the other.

In the Systemic Functional Linguistics approach any three integrated meaning in the concept of functional (Halliday, 1985: xiii). First, it is functional in the sense that it is designed to account for how the language is used. Second, the fundamental components of meaning in language are functional components. These components, called 'metafunctions' there are (i) to understand the environment (ideational), (ii) to act on the others in it (interpersonal) and, (iii) breathes relevance into the other two (textual). Third, each element in a language is explained by reference to its function in the total linguistics system.

From the above explanation, we can conclude that a clause has a close relation to the ideational (both of the function and the meaning), so that absolutely a clause also can be related to the transitivity. The relation in here we can analyze a clause by the transitivity system or what Halliday (1985: 101) calls as analyzing the meaning of clause as representation. Its role as a means of representing patterns of experience. A fundamental property of language is that it enables human beings to build a mental picture of reality, to make sense of their experience of what goes on around them and inside them. Clause is a representing patterns of experience because of it researcher want to know how students could be representation the meaning of clause in his instructional material in the English for MKWU class. So, the researcher interested in conducting the research entitled "The process and circumstance in instructional material 'English Module for MKWU'".

Method

The research method in this research is descriptive qualitative method. According to Ary (1985: 322), Descriptive research studies are designed to obtain information concerning the current status of phenomena. Descriptive research is not only limited in collecting and explaining data but also analyzing and interpreting data. According to Gay (1992: 13),

descriptive research determines and reports the way things are. One common type of descriptive research involves assessing attitudes or opinion toward individual, organizations, events, or procedures" On the other hand, Bungin (2001: 48), says that Descriptive research purpose to describe some events, condition, or phenomena in society become the object of research. Lambert (2012: 255) says that qualitative descriptive studies tend to draw from naturalistic inquiry, which purports a commitment to studying something in its natural state to the extent that is possible within the context of the research arena.

For data collection technique, the researcher will collect the data from documents; instructional material "English for MKWU". The researcher itself it available with Bogdan and Biklen idea that the one of features in qualitative research is the researcher as the key instrument. Then, in the data collection, the researcher act as main instrument.

- Documents; instructional material "English for MKWU"

The data will be taken after reading and analyzing clause based on transitivity system, and then describing the elements of transitivity system from the instructional material "English for MKWU" by using Systemic Functional Linguistics (SFL). The qualitative data were analyzed by using Miles & Huberman (1992: 16) data reduction, data display and conclusion drawing.

The procedure of data analysis in qualitative research begins by reviewing the entire data collection from instructional material with direct observation and analyzed by arranging the data systematically. Data collected by copying all text, then the text is decomposed into a series of clauses, and is identified with the number corresponding to the occurrence in the text. The figure is then fitted with a serial number text. To identify the syntactic units in each clause, used table consists of several columns. First Column clauses: the first column to clause identity number, the second column to the conjunction, the third column to the clause, the fourth column for the verb phrase (type process).

Finding and Discussion

Findings

The data are taken from the six units of the module entitled Pendidikan Bahasa Inggris. Each clause of the English text was analyzed into three constituents of transitivity system. They are process types, participant functions, and circumstantial elements. The process types were classified into material process, mental process relational process, behavioral process, existential process and verbal process. The participant functions were related to the process types.

Process Types

There are 334 clauses analyzed in this research. The characterized processes are relational, material, verbal, mental, existential, and behavioral in order. The distribution of the process types of transitivity analysis characterized in the module can be seen in the table below:

Table 1: Process Types of Transitivity analysis in the module

No.	Types of Process	Σ	CL		FT		V		UM		B		T		SRS		RIC	
			Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
1	Material	157	4	36.4	2	15.4	0	0	12	50.0	21	30.43	42	58,3	50	59.4	26	63.4
2	Relational	102	5	45.4	6	46.1	10	50.0	5	20.8	27	39.13	20	7.8	19	22.6	10	24.4
3	Verbal	10	0	0	1	7.7	0	0	1	4.0	0	0	2	2.8	6	7.2	0	0
4	Mental	29	1	9.1	0	0	3	15.0	2	8.4	10	14.49	2	2.8	6	7.2	5	12.20
5	Existential	5	0	0	0	0	3	15.0	2	8.4	0	0	0	0	0	0	0	0
6	Behavioral	31	1	9.1	4	30.8	4	20.0	2	8.4	11	15.94	6	8.3	3	3.6	0	0
	Total	334	11	100	13	100	20	100	24	100	69	100	72	00	84	100	41	100

Material process is the highest process found in the module. It is about 157 times (47.01%) and it refers to process of construing material world of doing. Relational Process occurs 102 times (30.57%) in the module and it construes relationships of description. Verbal process occurs 10 times (2.99%) which refers to process of construing something said by its participant.

Mental process occurs 29 times (8.68%) and it refers to process of thinking, knowing, liking, wanting and perceiving. Behavioral process occurs 31 times (9.28%) in the module and it refers to process of behavior. and Existential process has the lowest frequency of occurrence and it only occurs 5 times (1.50%) in the module.

Participant Function

There are 448 participants found in this research. It reflects the process types that are characterized in the module. The amount of participants in a process also represents the dominant process. The result of the participant functions of transitivity analysis that are characterized in the module can be seen in the table below:

Table 2: Participant Functions of Transitivity Analysis in the Module

No.	Participant Function	CL		FT		V		UM		B		T		SRS		RIC		TOTAL	
		Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
1	Actor	2	14.3	2	10.5	0	0	12	26.1	23	20.2	29	29.3	31	33.3	14	48.3	113	25.5
2	Goal	4	28.6	1	5.3	0	0	10	21.7	23	20.2	29	29.3	24	25.8	0	0	91	20.5
3	Behaver	1	7.1	2	10.5	1	3.3	2	4.3	5	4.4	4	4.0	4	4.3	0	0	19	4.3
4	Senser	0	0	0	0	5	16.7	2	4.3	7	6.1	2	2.0	3	3.2	4	13.8	23	5.2
5	Phenomenon	1	7.1	0	0	4	13.3	1	2.2	8	7	1	1.0	3	3.2	1	3.4	19	4.3
6	Sayer	0	0	1	5.3	0	0	1	2.2	0	0	1	1.0	3	3.2	0	0	6	1.4
7	Target	0	0	1	5.3	0	0	0	0	0	0	0	0	1	1.1	0	0	2	0.5
9	Recipient	0	0	1	5.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2
10	Verbiage	0	0	0	0	0	0	8	17.4	0	0	2	2	1	1.1	0	0	11	2.5
11	Carrier	2	14.3	5	26.3	6	20	5	10.9	14	12.3	12	12.1	13	14.0	10	34.5	67	15.1
12	Attribute	1	7.1	4	21.1	5	16.7	2	4.3	11	9.6	12	12.1	9	9.7	0	0	44	9.9
13	Identified	1	7.1	1	5.3	3	10	1	2.2	12	10.5	3	3.0	0	0	0	0	21	4.7
14	Identifier	2	14.3	1	5.3	3	10	1	2.2	11	9.6	4	4.0	1	1.1	0	0	23	5.2
15	Existent	0	0	0	0	3	10	1	2.2	0	0	0	0	0	0	0	0	4	0.9
	Total	14	100	19	100	30	100	46	100	114	100	99	100	93	100	29	100	444	100

From the table above, it can be concluded that the most dominant participants found in the module were related to the most dominant process, which is Material. The sum of participants from both Actor and Goal of Material exceed that of participants from the other processes.

Circumstantial Elements

There are 286 Circumstances found in this research. The result of Circumstantial Elements of transitivity analysis in the module can be seen in table below:

Table 3: Circumstance Elements of Transitivity Analysis in the Module

No.	Circumstance Elements	CL		FT		V		UM		B		T		SRS		RIC		TOTAL	
		Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
1	Cause	4	40	6	46.2	1	14.3	5	27.8	12	23.5	21	33.3	23	31.9	22	42.3	94	32.9
2	Time Location	1	10	5	38.5	0	0.0	3	16.7	6	11.8	1	1.6	4	5.6	8	15.4	28	9.8
3	Place Location	4	40	2	15.4	6	85.7	4	22.2	10	19.6	6	9.5	0	0	10	19.2	42	14.7
4	Manner	1	10	0	0	0	0	3	16.7	6	11.8	20	31.7	23	31.9	0	0	53	18.5
5	Adjunct Conjunction	0	0	0	0	0	0	2	11.1	11	21.6	7	11.1	22	30.6	4	7.7	46	16.1
6	Extent	0	0	0	0	0	0	1	5.6	4	7.8	8	12.7	0	0	0	0	13	4.5
7	Instruction	0	0	0	0	0	0	0	0	2	3.9	0	0	0	0	5	9.6	7	2.4
9	Length	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5.8	3	1
	TOTAL	10	100	13	100	7	100	18	100	51	100	63	100	72	100	52	100	286	100

From the table above, the circumstantial Elements that are characterized in the module were Cause, Time Location, Place Location, Manner, Adjunct Conjunction, Extent, Instruction, and Length.

Discussion

Discussion section begins with the characterized processes and participants found in the module. The second part will explain about circumstantial element and the last one will explain about implication of transitivity analysis and relevant theories to teaching and learning.

1. *Process Types and Participant Functions*

a) Material Process

It has been stated that material process is the biggest number of processes applied in the module (47.01%). This process is applied in 157 clauses. Material process indicates processes of doing, usually physical and tangible action. Halliday calls them action clauses expressing the fact that something or someone undertakes some action or some entity "does" something.

The process of doing, usually physical and tangible action in the module are indicated by employing some verbal groups such as; plays, asked, taught, put, brought, could not put, slipped, felt, pulled, helped, did, takes, contains, carry, replaced, produced, learned, reveals, invaded, produced, destroyed, blended, located, faces, illustrates, reveals, reflect, show, exhibits, create, takes and etc. Some of the Material Processes found are:

Table 4: Example of Material Processes found in the Module

2-3	And	who currently plays for La Liga team Barcelona and the Argentine national team	Material

The Material process involves Actor and Goal as Participants. Actor occurs 113 times (25.5%) and Goal occurs 91 times (20%). There are other participants in the material namely recipient, Client, Initiator, and Scope. Recipient occurs 1 times (0, 2%). But there is no Client, Initiator, and Scope found in the module. Some of the Participant in Material Process found are:

Table 5: Example of the Participant in Material Processes found in the Module

7-1	Holmes and Rahe	(1967)	developed	the Social Readjustment Rating Scale (SRRS)
	Actor	Circumstance	Material	Goal

The word developed refer to the activity done by the subject Holmes and Rahe that are usually called as Actor And then the Social Readjustment Rating Scale (SRRS) usually called as Goal in Material Process.

b) Relational Process

The second dominant process applied in the module is relational process (30.54%) and it is applied in 102 clauses. Relational process is divided into two modes: identifying relational process and attributive relational process. The relational process such as; was established, is, has, was, become, have drawn, was born, have ever seen, are, and etc. Some of the Relational Processes found are:

Table 6: Example of Relational Processes found in the Module

1-3	The UGM campus is located in a special district of Yogyakarta	Relational

There are two form of Relational. The first one is Attributing. The Relational Process of Attributing has 111 occurrences and takes 25% of the total Process Types. It is supported by the number of Carrier 67 times (15.1%) and attribute 44 times (9.9%) as the Participants.

Table 7: Example of the Participant in Relational Processes found in the Module

2-1	He	is	an Argentine footballer
	Carrier	Relational	Goal

c) Behavioral Process

The third dominant process applied in the module is behavioral process (9.28%) and it is applied in 31 clauses. Behavioral process is a process of physiological and psychological behavior. The behavioral process such as; left, moved, won, learned, probably, flows, cool, loses, and etc. Some of the Behavioral Processes found are:

Table 9: Example of Behavioral Processes found in the Module

6-3	Because	Heat always flows from a warm object to cooler surroundings	Behavioral

The behavioral Process has a Behaver as participants. The Behavioral Process occurs 19 times (4.2%) of the Total Participant Functions. Some examples are:

Table 10: Example of the Participant in Behavioral Processes found in the Module

2-6	He	left	Rosario-based Newell's Old Boys' youth team in 2000
	Behaver	Behavioral	Circumstance

d) Mental Process

The fourth dominant process applied in the module is mental process (8.68%) and it is applied in 29 clauses. Mental process is a process refers to the process of thinking, perceiving, liking and wanting. It process such as; to know, like, see, get, felt, didn't realize, think, loved, interests, devotes, chooses, must accept, experienced, to be inconsistent, and etc. Some of the Mental Processes found are:

Table 11: Example of Mental Processes found in the Module

3-9	I	prefer	Reading a novel	In this room
	Senser	Mental	Phenomenon	Circumstance

e) Verbal Process

The next process applied in the module is verbal process (2.99%) and it is applied in 10 clauses. Verbal process is a process of saying. It process such as; declared, asked, told, called, asked, criticized, report, suggest, discussed and etc. Some of the Verbal Processes found in the module can be seen below:

Table 13: Example of Verbal Processes found in the Module

6-44	For example, small birds called chickadees,	Verbal

The Verbal Process usually has a Sayer as the main participant in Verbal. But, many clauses contain implicit Sayer. The other participants in Verbal process are Receiver, target and Verbiage. Sayer occurs 6 times (1.3 %), Receiver occurs 1 time (0.2%), Target occurs 2 times (0,4%) and Verbiage occurs 11 times (2.5%). Some examples of verbal Process found in the textbook can be seen below.

Table 14: Example of the Participant in Verbal Processes found in the Module

5-58	he	chooses	to risk death	in order to help other people
	Sayer	Verbal	Receiver	Verbiage

f) Existential Process

The next process applied in the module is existential process (1.50%) and it is applied in 5 clauses. Existential process is a process of saying. It process such as; there are, there is, there were and etc. Some of

the Verbal Processes found in the module can be seen below:

Table 15: Example of Existential Processes found in the Module

3-11	In this room there is a night table next to the bed, a TV, a radio , and a computer	Existential

The Existential Process has a participant named Existent. In the module, the Existential Process has 4 occurrences and takes 0.9% of the total process. Some of the Verbal Processes found in the module can be seen below:

Table 16: Example of the Participant in Existential Processes found in the Module

3-11	In this room	there is	a night table next to the bed, a TV, a radio , and a computer
	Circumstance	Existential	Existent

2. *Circumstantial Elements*

There are 286 Circumstances found in this research. The result of Circumstantial Elements of transitivity analysis characterized in Module can be seen in Table 3.

a) Cause

Cause refers to reason, purpose, and behalf. In the module, it occurs 94 times (32.9%). Some examples are:

Table 17: Example of the Purpose – cause Circumstantial Element found in the Module

1-4	offers	Student easy access	To the city, a cultural and political center for Indonesia's Javanese culture
	Material	Participant	Circumstantial

b) Time Location

There are 28 Circumstantial Element of time location (9.8%). Some examples are:

Table 20: Example of the Time – Location Circumstantial Element found in the Module

2-1	Lionel Messi	Was born	On 24 June 1987
	Participant	Relational	Circumstantial

c) Place Location

There are 42 Circumstantial Element of time location (14.7%). Some examples are:

Table 21: Example of the Place – Location Circumstantial Element found in the Module

4-1	Last week	My uncle	asked	me to go fishing	With him in the river near his house
	Circumstantial	Participant	Verbal	Participant	Circ. Place

d) Manner

Manner 53 times (18.5%) in the module. Some examples are:

Table 22: Example of the Manner Circumstantial Element found in the Module

2-1	He	did	it	very patiently
	Participant	Relational	Participant	Circumstantial

e) Extent

There are 13 Circumstantial Element of Extent (4.5%). Some examples are:

Table 23: Example of the Extent Circumstantial Element found in the Module

5-29	it	Was not discovered	Until the seventeenth century
	Participant	Relational	Circumstantial

Conclusion and Suggestion

This study has answered the research questions stated in the earliest chapter and it can be concluded that; first, the characterized Process Type of the English text in instructional material "English for MKWU" is Material Process. It reaches 47.1% as the highest frequency of occurrence in the module. This is not also relevant to the competence promoted by the module, which is communicative and meaningfully. Second, the characterized Participant Functions of the English text in instructional material "English for MKWU" is the participants of Material Process named Actor and Goal. They are mentioned 204 times and take 45.5% of the total Participant. Third, the characterized Circumstantial Element of the English text in instructional material "English for MKWU" is Material Process is Cause. There are 94 Circumstantial of Cause found in the module. It exceeds half the total Circumstance, which is 32.9%.this is relevant to what has been stated in Brown's Chart (2001:106), the students do have to think deeper about condition, default, and concession. And the last, some competencies revealed in the module have not been implemented well based on transitivity system, theories of and intermediated learners.

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Teaching Reading Comprehension by Using Flash Media Animation of Junior High School Students

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ABSTRACT

This research aims to analyze the teaching reading comprehension by using flash media animation in the eighth grade students at Elkisi Junior High School Mojokerto. There are three objectives of the research that must be answered; (1) To find out the implemented of the techniques in teaching reading comprehension using flash media animation; (2) to reveal the effects of using flash media animation for the students in their reading skill; (3) to find out why flash media animation is used in teaching reading. Descriptive qualitative is applied as the method of the research while the observation was conducted to obtain the data to answer the first research question about how are the technique and implementation of teaching reading comprehension using flash media animation. Flash media animation can make students more excited, not feel sleepy and not feel bored, and While to answer the last question why flash media animation is used to teach reading comprehension that the researcher interviewed the teacher.

Keyword: Teaching, Reading Comprehension, Flash Media Animation

Introduction

Education is very crucial and interesting. Education has been discussed by many stake holders and educators. According to the National Education System Law (2003:1) "Education is the conscious and deliberate effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for students". Basically, every country expects for their development to grow better. It is the crucial role of education. By having a good education, it can determine whether a country can be called as a developed or advanced one. "Education as power means competent and strong enough to enable us, the majority of people, to decide what kind of a world" (Brameld, 1999:2). Thus, if a country gives a high concern on the education of their people, it will be helpful to the development of the country itself.

English is as an international language which is spoken in the most international events and is used as the medium of information flow on science, technology and culture. As we understand that learning a foreign language is more difficult than learning a national language or a mother tongue. It is because the foreign language has completely different aspects and systems which should be understood by the students or the learners, such as pronunciation, spelling, and the cultural background of the language. Recently, English seems to be a need. It is signed by the development of a number of English courses everywhere. Carrion (2013:1) describes "English can be at least understood almost everywhere among scholars and educated people". English has been taught even from the early childhood education. The target that both schools and many English courses expect is to communicate by using English fluently.

Communication is the activity to convey meaning through the exchange of thoughts, information, or expression. Therefore English was developed to achieve the skill of communication either written or spoken. According to Lim (2014:1) stated when we think about English skill, there are four the English skills (listening, speaking, reading, and writing), reading is the most emphasized in English teaching and learning process.

Quite simply without solid reading, second language readers cannot perform at levels they must be succeed in reading. Thus, reading is not passive but rather an active, involving the reader in on going interaction with the text. Furthermore, reading constantly involves guessing, predicting, checking, and comprehending. In reading. Students may enjoy from time to time getting away from the usual pattern of reading the story or article aloud at sight. This is particularly true of better readers what may be undesirable as routine procedure has real value as an occasional variation. Reading is one of the skills that is quite important is reading skill. So teacher must provide media in the learning process in order to trigger their interest to improve reading skill. They can also be audio, visual, or learning English. In this case, in the way they emphasize their reading skill. By seeing the problems, it is important that a study of English especially in reading should be done. Therefore, the researcher took the title "Teaching Reading Comprehension by Using Flash Media Animation of Junior High School Students". Moreover, teaching reading comprehension by using flash media animation that is still hard to find and not accustomed used by teachers in teaching. The teachers must know the implementation of this technique and the effects of using this technique in learning and teaching process because sometimes reading overlooked in language teaching.

Many teachers focus on presenting and practicing language that they practice the skills of speaking and listening in class they might set writing task for homework. As Pollard (2008:4) said "Reading is considered by many to be the neglected aspect of language teaching". Furthermore, the reason why the teacher used flash media because it can make students become more interested in learning English. It can add insight animation as well. According to Rahim (2011:5) "Menggunakan media flash bisa menambah wawasan pada bidang animasi yang jarang di bahas dalam pendidikan". So, it can be said that learning by using media flash can make students be creative.

There are many considerations that should be taken on how to teach and what to teach. It is true that children are different from adult physically and mentally. According to Davis (2010:9) early adolescents are in a particularly difficult stage of development. They begin to look at themselves, they begin to create, to seek their own self-image, to try new behaviors, to wonder, to be not a child, but not yet an adult.

Pollard (2008:4). "Reading is considered by many to be the neglected aspect of language teaching. However it is essential for student to practice the reading skill. The need to be introduced to reading and given opportunities to practice. Reading also involves students interacting with visual input of language which they need to process and understand so the efficient reader interacts with a text. In reading, there are three sub skills. According to Pollard (2008:45) "They are reading for gist, reading to extract detail

information, and reading to extract specific information".

There are many factors which can make children understand well about the text. According to Healy (2002:1) "It is dependent upon a number of factors including a child's world knowledge, vocabulary, and memory skills". Comprehension is the goal of both reading and listening. Successful comprehension enables readers (or listeners) to acquire information, to experience and be aware of other worlds (including fictional ones), to communicate successfully, and to achieve academic success (Lancaster University 2009:2). Flash media animation also program which can help English teacher in reading comprehension. "Flash media animation mampu menampilkan secara animasi dan statis dan menampilkan gambar atau tuisan juga vidio sehingga mempermudah guru untuk memberikan materi" (Rahim, 2011:4). Based on the research, flash media animation is a program which is used to design presentation and publication the program is the supporting in usage picture, sound and text media animation. Multimedia is very useful in language classroom. Kusriani (2008:3) states that teaching learning process with multimedia is more fun and educative. She also states that by using media in the classroom, it can stimulate the students' brain to be more active.

Adobe Flash or flash media animation is a program that is used to design presentation and publication the program is the supporting in usage picture, sound, and text media animation. Animation is a process of creating a continuous motion and shape change illusion by means of the rapid display of a sequence of static images that minimally differ from each other. The illusion as in motion pictures in general is thought to rely on the phenomenon. As Rahim says (2011:63) "Animasi adalah gambar yang disusun secara berurutan dan ketika rangkaian gambar tersebut di tampilkan dengan kecepatan yang memadai, rangkaian gambar tersebut akan terlihat bergerak". Therefore, the use of animation is required by the teacher as the media to transfer any material that is needed by students in order to make them feel more interested. Flash is animation sofware which facilities multimedia operation "Flash animasi adalah program yang digunakan untuk membuat animasi" (Ryuditha 2010:1). There are three advantages of flash media animation According to Bray (2011:1). There are three advantages of flash media animation. According to Bray (2011:1) as follows:

> *"There are three advantages of flash media animation (a) Flash manipulates vector and raster graphics to provide animation of text, drawings, and still images. (b) It supports bidirectional streaming of audio and video, and it can capture user input via mouse, keyboard, microphone, and camera. (c) Flash contains an object-oriented language called Action Script and supports automation via the Java script Flash language".*

Based on Bray's view in the previous explanation, flash media animation has three benefits. Firstly, they can be used to manipulate vector and raster graphics that are used to add some texts, pictures, or even still images. Secondly, flash media animation can support bidirectional streaming of audio and video. So that it can capture user input. Lastly, flash media animation can support automation via the Java script Flash Language.

Researcher examined this research because many teachers still focus on presenting and practicing language they practice the skill of speaking and listening

in class they might set writing task for homework. Furthermore, the reason why the teacher used flash media because it can make students more interested in learning English.

The Method

The subjects of the research are the teacher and 17 students who are in Junior High School at ELKISI Mojokerto. It is one of boarding schools in Mojokerto. The data were taken from observation, interview, and questioner. The observation was conducted to obtain the data to answer the problems about how are the technique and implementation of teaching reading comprehension by using flash media animation. While interview guidelines and questioner consisted of fifteen questions for students to answer the problems about how the implementation and the effects of using flash media animation for students in their reading skill. Therefore the teacher would know the reasons the used of this technique. Descriptive qualitative is applied as the method of the research.

The result of Data Analysis

The technique and implementation of teaching reading comprehension using flash media animation for students

Based on the observation that was made by the researcher, of eighteen students learning to read almost everything like using flash media animation. It was proved the enthusiasm of students with learning to read using flash media animation. Before knowing what are the technique of teaching reading comprehension using flash media animation in the eighth grade at Elkisi Junior High School.

The researcher observed teaching and learning process in the class and analyzed the technique of teaching reading comprehension through flash media animation used by the teacher in order to overcome the problems. Firstly, the teacher prepared lesson plan, then, entered the class, greeted the students, and then gave ice breaking, like a game to make the students relaxed and understand whether they had focused or not. The game was when the teacher said "Yes", the students must clap their hands once, when the teacher said "No", they must clap their hands twice, and when the teacher said "OK", the students must clap their hands three times. Based on the researcher's observation, it can be said the students responded the teacher's instruction well. Secondly, the teacher showed video of flash can see the picture, they can listen and read the text as well. Secondly, the teacher showed video of flash media animation.

There is a subtitle inside the video, therefore, instead of the students can see the picture, they can listen and read the text inside the video of flash media animation, the teacher gave questions to the students about reading comprehension. However, none of the students knew the answer. Thus, the teacher explained what reading comprehension. However, none of the students knew the answer. Thus, they were asked to write at least 50 words that had been read in video or flash media animation from the beginning until the end. Then the students were asked to listen first and repeat by reading aloud the text of the video together. After reading the text together, they were asked to translate the text into Indonesian to see whether they understood the text well. Lastly, the teacher instructed chose one of the students to retell the story by using their own words. Then, the students explained that the text had been read is narrative text.

In the end of teaching and learning process, the teacher delivered an important information that reading comprehension is very essential for them, especially in National Examination.

Based on the observation that has been done by the researcher, it can be concluded that teaching technique that the teacher used is direct instruction method. Direct instruction method is an approach of teaching technique that is used by teacher which aims is to help students in improving their basic skill in order to gain any information step by step. According to Arends (2011:264), "A teaching model that is aimed at helping students learn basic skills and knowledge that can be taught step by step.

The effects of using flash media animation for students in their reading skill

Based on the findings that was made by the researcher to the students in order to find out the effects of using flash media animation for students in their reading skill. In this interview researcher took five students to be interviewed. When interview the students, researcher gave five questions, the first question that the researcher wanted to know whether the students often read English text, the next question researcher wanted to know the students' response about learning to read by using flash media animation, and the last question researcher wanted to know the students' reasons about learning to read by using flash media animation. There are only five that have been interviewed because the researcher considers them as the representation of students who have high ability and lower ability in learning English.

Answering the questions above that researcher conclude that the five students which love reading, there were five students who liked English class but depending on the media used by the teacher. Furthermore, there were three students often read English text and two students sometimes read English text. Moreover there were five students who answer interesting, not boring and not make sleepy. While the questionnaire to students, ten children chose to learn to read using flash media animation. So it is evident that the animation was effective for learning to read.

The reason chose flash media animation to teach reading comprehension

While to answer the last question why flash media animation is used to teach reading comprehension, the researcher interviewed the teacher. From the interview with the teacher, the researcher can conclude that flash media animation is a series of images that move so it looks nicely. Not only that but also it can make students more excited to learn English and not feel sleepy and not feel bored.

Conclusion

The teacher used direct instruction method is an approach of teaching technique that is used by teacher which aims is to help students in improving their basic skill in order to gain any information step by step. According to Arends (2011:264), "A teaching model that is aimed at helping student learn basic skills and knowledge that can be taught step by step. Based on the interview guidelines and questioner that was made by the researcher to the students in order to find out the effects of using flash media animation for students in their reading skill. In this interview researcher took five students to be interviewed. When interview the

students, the researcher gave five questions, the first questions that the researcher wanted to know whether the students liked to read or not, the second question that the researcher wanted to know whether the students liked English class or not, the third question that the researcher wanted to know whether the students often read English text.

The next question, researcher wanted to know whether the students' response about learning to read by using flash media animation, and the last question researcher wanted to know what is the reason students about learning to read by using flash media animation. There are only five that have been interviewed because the researcher considers them as the representation of students who have high ability and lower ability in learning English and the questionnaire to students, ten children chose to learn to read using flash animation was interesting and eight students chose to learn to use it very interesting animation. So it is evident that the animation was effective for learning to read.

To answer the last question why flash media animation is used to teach reading comprehension in the eighth grade of junior high school students. The researcher interviewed teacher, from interview with teacher. The researcher can conclude that flash media animation is a series of images that move so it look nicely, can make students more excited to learn English, not feel sleepy and not feel bored.

Based on the analysis and discussion in chapter one, it can be concluded that by using flash media animation that can bring many benefits for both the students and the teacher. This can make the students not feel bored and sleepy. The teacher also can get advantages. The teacher also can get advantages. The teacher becomes more enjoyable during the teaching and learning process because the students can work together smoothly. Thus, this can make the students not feel hard to learn.

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The Use of Predict-Explain-Observe-Explain In Improving the Students' Speaking Ability

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ABSTRACT

This research aimed to explain the improvement of the students' accuracy and fluency in speaking. An Experimental which was conducted in Pre-Test, Treatment, and Post-Test of five meetings. The location of this research was taken at eleventh year students of SMA Batara Gowa with 35 students as sample. This sample was chosen by using purposive sampling technique. The researcher used speaking test to asses and examine the students' speaking ability. The pre-test was given to asses and examine the students' prior speaking ability treatment while post-test was given after treatment of using Predict-Explain-Observe-Explain method. The research findings indicated that the application of Predict-Explain-Observe-Explain was significant in improving the students' accuracy and fluency in speaking. It was proved by the mean score of Pre-test was 3.48 then improved to be 8.32 in Post-test. There was significant because the result of t-test was 26.88 and t-table was 2.042. It mean that there was the improvement of the students' accuracy and fluency in speaking.

Keywords: predict, explain, observe, and improve.

Introduction

Speaking is one of activities in communication. It is one form of information through oral communication in the world and it becomes more and more useful. Communication is essentially a process of sending and receiving message. Communication among people is complicated because it is required the sender of message to express what he or she intends to communicate and for the receiver to interpret the message accurately. In this case, language plays an important rule which must be produce to convey our ideas, feeling in our life.

Many students considered learning English especially speaking difficult subject. This difficulty is caused by psychology factor of the students and lack of teachers' creativity in teaching speaking. Roch (2007) stated that this problem related extremely with the use of teaching strategy.

The teacher always gives the materials of learning speaking for only instructing and giving example to the students, they just concentrate in learning visually without caring the students' motivation and competence. So, the teaching and learning process make the students bored and have low motivation to follow the teaching learning process. This condition influences failure in education specially teaching foreign language. Djamarah and Zain (2002) said to teach someone, a teacher has to choose a suitable learning model because this can influence the students' learning outcome.

Realizing that speaking is not easy to learn, both teacher and students should be preparing themselves to learn it. Teacher as

subject of learning process are demanded to be more creative in presenting the lesson (speaking) by making some strategies or method that can be used in teaching process. While students as object of learning process are demanded to more active in learning speaking. No one is doubt; the interaction is the key to improve speaking ability. Based on the background above the researcher formulates question as follows:

1. Does Predict-Explain-Observe-Explain method improve the students' accuracy in speaking?
2. Does Predict-Explain-Observe-Explain method improve the students' fluency in speaking?

Literature Review

Many researchers have reported to expose the identification of the students' attitudes and interest in learning English to make the teaching and learning process more effective, especially in the teaching of speaking. Some of the researchers' findings are cited concisely below:

Wah Liew, (2004). In his thesis. The Effectiveness Predict-Explain-Observe-Explain Technique in Diagnosing Student's Understanding of Their science and Identifying Level of Achievement. He found that the development of a model Predict-Explain-Observe-Explain on students' understanding of scientific concepts, in which through the application of this learning model students will gain a deep understanding of the science concepts being studied.

Amin, (2004). In his thesis. Developing Speaking Performance through Cooperative Learning. He found that the cooperative learning developed the students speaking accuracy in the sense of acceptable pronunciation, correct grammar, and appropriate word choice. The teaching strategy works on five components as the foundations to have technical teaching, namely: class presentation, working in a team, having quiz, improving individual score, and team recognition. Extraordinarily, working in a peer-tutoring and a teacher who adhered to this kind of teaching are enchanting the students to learn best in speaking skill especially speaking accuracy.

Oral communication is a two-way process speaker and listener, and involves the productive skill of speaking and the receptive skill of listening (understanding). It is important to understand that receptive does not imply passive both in listening and reading language users are actively involved in the process of interpreting and negotiating meanings.

Brown (1999) concludes that speaking is an interactive process of constructing meaning that involves producing and receiving and processing information.

Chainstand (2006) concludes that speaking is learning to speak is obviously more difficult than learning to understanding the spoken language. While Chaney (2006) states that speaking is the process of building and sharing meaning through the use of verbal and non-verbal symbols, in a variety of contexts. It can be inferred that speaking is an exchange of knowledge and interactive process of building and sharing ideas, opinion, and feeling that involves producing and receiving information.

The Elements of Speaking

According to Harmer, (1991:159) aspects of speaking can be divided as follow:

1) Accuracy

Based on the Webster dictionary (1959) accuracy is the quality of being

accurate while in oxford dictionary in Khaerat (1991) accuracy is degree of being correct so the accuracy in speaking ability is the quality if being accurate in speaking. English ability in this case divided into things. They are pronunciation, vocabulary, and grammar (structure).

a) Pronunciation

Pronunciation is an act or result producing the sound of speech including articulation, vowel formation, accent and inflection. Sometimes the listener does not understand what we talking about because lack in pronunciation. Pronunciation is the fact of manner of articulate utterance. Certainly, pronunciation cannot be separated from intonation and stress use, which are the indicators of someone whether he has good pronunciation in language spoken. Furthermore pronunciation and stress are largely learned successfully by imitating and repetition. Often with reference some standard of contents or acceptability, the concepts of pronunciation may be said to include:

(1). the sound of language

The sound of language may be well meaningless. If you said /t/ (the line shows that this is phonetic scrip) a few times, e.g. tu, tu, it will not be very much English. Neither will be sound /k/, /a/, or /s/ but if we put all these are sound together a certain order we and up the word catch and does mean something.

(2). Stress

Native speakers of language unconsciously know about the stress and how it works, they know which syllables of words are stressed and they know how to use stress, to change the meaning of phrase, sentences and questions.

(3). Intonation

Intonation is clearly important item, and component user of language recognize what meaning it has and can change the meaning of word they say through using it in different ways, when we taught English language, students need to use rhythms and stress correctly if they are to be understood.

b) Vocabulary

Vocabulary is very important in speaking English. It is impossible to speak without mastery of vocabulary. Therefore, this element is somewhat essential to learn before practicing speaking. The students sometimes get trouble in memorizing all vocabulary that they have known because they seldom practice and use them. Thus, it needs to keep them in their mind.

Based on the Webster dictionary (1959), vocabulary is all words used by person or group and several definition of the words have given different writers such as Charles F. Hokket in Samad (1889:26). A word is thus any segment of a sentences bounded by successive points at which pausing is possible.

Harmer (1991:135) divides vocabulary in two types that is active vocabulary and passive vocabulary. Active vocabulary is the words that students have learned and they expect to be able to use them. Passive vocabulary is the words they can recognize but cannot be produced. Someone can be considered of having good vocabulary use, when the vocabulary produced is wide appropriate with certain situation of dialog of speech.

c) Grammar

One factor of in influencing the students' speaking skill is the functional grammar, the fact shows that the students sometimes want to speak with other people but they have lack of functional grammar.

Based on the Webster dictionary (1959) grammar is being of rules for the use of the words. In speaking skill, grammar always to be handicaps in performs pure speaking. It causes by the speaker sometimes afraid to make mistake of grammar in perform speaking while the arrangement of words in a sentence is not the same in difficult language, they are not even the same in sentences patterns.

Thus, if a students does not recognize the signal of the sentence for instant that "is he a lecturer?", signal a question, that " M. Basri can teach", signal a statement, and that " didn't she swim?", signal a negative question. He is probably missing significance of word order arrangement.

As for the use of grammar signal, students should learn it by acquiring a set of habits and not merely by recording examples of usage. It has been stated that sentences patterns, students should be trained to acquire the habit of producing it automatically. This is best one through oral pattern practice. For instance, students imitate the teacher in producing a certain pattern as "he is a lecture in such a way that they can produce it with relatives' case. Such a practice involves intonation, stress as well as phonemes in this case the teacher must be a good model.

2) Fluency

Based on Webster Dictionary (1991) fluency is ready and expressive use of language, it is probably best achieved by allowing the "stream" of speech to "flow" then, assume of this speech spills over beyond comprehensibility the river bank' of instruction or some details of phonology, grammar or discourse explained that fluency defined as the ability to get across communicative intent without to much hesitation and too many pauses or breakdown in communication: it refers to how well you communicate in natural manner. It is possible to be fluent build not accurate, and vise versa, that is accurate but not fluent.

Byrne (1987:78) states that the main goal in teaching the produce speaking skill will be oral fluency. This can be differed as the ability to express oneself intelligibly reasonable accurately and without too much hesitation (otherwise communication my break down because the listener loses in interest o best impatient. To attaint this goal, you will have to bring the students from the stage where they are mainly imitating a model of some kind or responding to cues, to the point where they can use language fluency to express their own ideas.

Based on the statement above, the researcher can conclude that fluency refers to be able to speak smoothly, and easy flow word or to person able to communication with base it suggested the ready flow an accomplished speaker and writer, it is usually a term of commendation.

a. Types of Classroom Speaking Performance

Heaton (1989:115) divides that oral communication consists of four general types:

1) Intra personal communication, in which individual communicates with

himself or herself usually by thinking but occasionally aloud
2) Interpersonal communication, in which two individuates communicate with each other face to face.
3) Group communication, in which several students meet face to face discuss whatever matter, may beat hard and in which those students share the source and receive ideas.
4) Public communication, in which one speaker present a message to a group of receivers in a face-to-face setting. While the receiving occasionally may adopt the source role, generally the speaker does most orally or the talking.

In speaking class, the students are expected to express the ideas, information and feelings to the other. Practicing use the language is very important in order to develop the students' ability in speaking. The students will not be able to speak fluently if they do not practice the language in good, correct and accurate manner.

b. Characteristics of a Successful Speaking Activity

Speaking skill which is also known as oral skill, it is very important in human interaction when people communicate with each other. There are two basics that can carry out human activities in communication with language, namely speaking and listening. In speaking the people put their ideas into word for other people or group novel that they can understand what they say and hope people or group can give them feedback. So, in oral communication, there are two ways process between speaker and listener, they are the productive skill of speaking and the receptive skill of understanding.

Ur (1995:115) in Fitriani (2011:20) states that, the students who know a language a referred to as "speaker" of language, as if speaking includes all other kinds of knowing and may if not most foreign language students are prima in learning to speech. He gave some characteristics when the speaking activity can be said have been successful. They are as follows:

1) The students talk a lot. The students should get as much as possible chance to speak. But, unfortunately, it is most usually time is taken up with the teachers talk or pause.
2) Participation is event. All students should get some chance to speak and give contributions; classroom discussion is not dominated by a minority of talkative participants.
3) Motivation is high. The students are full of desire to speak; because they are interested in the topic and have something new to say about it.
4) Language is of an acceptable level. The students express themselves in utterances that are relevant, easily comprehensible to each other and of acceptable level of language accuracy.

When the students study language they also think of now people speak and understanding each other. Speaking skill which is also known as oral skill plays a very important role in human interaction when people communicate their ideas to the other. Speaking is required to communicate idea, opinion and comments to make contact with other people in conversational situation. Almost of us learn speak and fact speaking is so much a part of daily life. However to speak involves developing a number of complex skills and different types of knowledge about how and when to communicate.

Speaking in the classroom has two functions: one is to learn the language; the other is to use it as people do in real life. The two functions often overlap: speaking to learn can lead to speaking to communicate, and this in turn consolidates learning. But the precondition for communication is learning, so that pupils are in a position to accomplish the last three steps of the planning and execution process.

Predict-Explain-Observe-Explain Method

The writer in this case like to give the definition about Predict-Explain-Observe-Explain Method. This method uses in improving the speaking ability. Predict-Explain-Observe-Explain Method come from the discrepant events because there are many events that surprise us. We expect that one thing will happen, and something else happen listened. As a result of this observations, the Predict-Explain-Observe-Explain Method was developed.

According to Purnomo (2010), learning Predict-Explain-Observe-Explain model using four main steps, namely:

a. Prediction is a process of making allegations against an event. In making the allegation students already think of a reason why they make such allegations. In this process students are given the widest possible freedom arrange alleged by reason, teachers should not limit students' thinking so that many ideas and concepts that emerged from the mind of students. In the prediction process, the teacher can also understand that a lot of misconceptions about what happens to students. It is important for teachers to help students to establish a correct concept.
b. Explanation is a process where students have to explain why they make allegations like that.
c. Observation is to do the research, observation of what is happening to test the prediction that they convey truth. The most important thing in this step is a confirmation of their predictions.
d. Explanation is the briefing especially about the conformity between allegation and the results of the observation phase. If the result is consistent with the predictions and observations after they obtain an explanation of the truth of his prediction, then the students are more positive concept. However, if the suspicions are not right then the student can find an explanation of the inaccuracy of predictions. Students will experience a change in the concept of a concept that is not true become true. Here, students can learn from their mistakes, and generally learn from mistakes will not be easily forgotten.

The things that need to be considered in the Predict-Explain-Observe-Explain learning model is as follows:

- The issue should be raised to trigger a problem of cognitive conflict and spark curiosity.
- Predictions must be accompanied by a rational reason. Prediction is not just guessing.
- The demonstration must be observed clearly, and can provide answers to the problem.
- Students involved in the explanation.

White and Gustone (1992) introduced the Predict-Explain-Observe-Explain as a model of efficient learning to generate ideas or ideas of students and a discussion of their ideas. Procedures of Predict-Explain-Observe-Explain Method are

students' prediction of the results of the demonstrations, explained their prediction, discussed the reason of their prediction, and finally explained the results of prediction of their observations. How the strategy works:

a. Asking students to predict first what will happen.
b. Asking students to explain the reasons for their predictions gives the teacher indications of their theories. This can be useful for uncovering misconceptions or developing understandings they have. It can provide information for making decisions about the subsequent learning.
c. Evaluating their predictions and listening to others' predictions helps students to begin evaluating their own learning and constructing new meanings.
d. Explaining their predictions about the conformity between allegation and the results of the observation.

According to Liew & Treagust (1995), Predict-Explain-Observe-Explain is a teaching strategy that probe understanding by requiring students to carry out four tasks. Firstly, the students must predict the outcome of some event and must justify their prediction. Secondly, they explain why they believe their prediction. Thirdly, they describe what they see happen and finally they must reconcile any conflict between prediction and observation.

Richard Gunstone has done a lot of research on discrepant events and on the use of this teaching strategy to bring out conceptual change in children. He said that one interesting thing I have noticed for students with discrepant events is that, unless we have the students hypothesize what will happen, they don't even notice the event is discrepant. The next time we ask them to predict what will happen, they predict what they expect to happen rather than what they saw happen in the actual situation.

But, there are hints for this method namely, at least half of the Predict-Explain-Observe-Explain Method we use in the classroom should be non-discrepant events. Because, we want our students to make reasonable predictions. It is better to choose events which are normally discrepant.

Practicalities:

Step 1: Predict:

Describe to the students what we are going to do. Then ask them to predict what will happen.

Step 2: Explain:

Ask them why they believe that. An important part of science is to make our ideas explicit. The most common form of communication we use is language and the easiest form of language to use in the classroom are talk. So, ask the students to tell about why they believe what they believe.

Step 3: Observe:

Ask the students to observe what they believe.

Step 4: Explain:

Ask the students to hypothesize about why things happened the way they did.

Methodology

In this research, the researcher used pre-experimental design. It was aimed to find out the effectiveness of Predict-Observe-Explain method in improving the students' speaking ability at eleventh year of SMA Bumi Batara Gowa. The number of the sample was 35 students. This sample is chosen by using purposive sampling technique.

The researcher used speaking test to asses and examine the students' speaking

ability. The tests are pre-test and post-test. The pre-test is given to asses and examine the students' prior speaking ability treatment while post-test is given after treatment of using Predict-Explain-Observe-Explain method as the manner to asses and examine the students' speaking ability. Both of pre-test and post-test are used to find out the improvement of the students' speaking ability after treatment by using Predict-Explain-Observe-Explain method.

Findings

1. The improvement of the students' Accuracy

The use of Predict-Explain-Observe-Explain in improving the students' speaking ability deals with accuracy and fluency. The improvement of the students' accuracy dealing with pronunciation, vocabulary and grammar at the eleventh year students of SMA Batara Gowa can be seen clearly in the following table:

Table 1: The improvement the students' Accuracy

No.	Indicators	Mean score		The Improvement
		Pre-test	Post-test	
1.	Pronunciation	2.08	3.94	1.86
2.	Vocabulary	1.77	4.17	2.4
3.	Grammar	1.62	4.14	2.52
4.	$\sum X$	5.47	12.25	6.78
5.	$\overline{X}$	1.82	4.08	2.26

The table 1 above indicates the significant improvement of the students' accuracy. The mean score of pronunciation in pre-test is categorized as poor (2.08). The mean score of pronunciation in post-test is categorized as good (3.94). The mean score of vocabulary in pre-test is categorized as poor (1.77). The mean score of vocabulary in post-test is categorized as good (4.17). The mean score of grammar in pre-test is categorized as poor (1.62). The mean score of grammar in post-test is categorized as good (4.14).

Therefore, the use of Predict-Explain-Observe-Explain method in teaching and learning process can improving the students' accuracy in pre-test and post-test. The students' achievement in post-test is greater than in pre-test (4.08 > 1.82).

2. The Improvement of the students' Fluency

The use of Predict-Explain-Observe-Explain in improving the students' speaking ability deals with accuracy and fluency. The improvement of the students' fluency at the eleventh year students of SMA Batara Gowa can be seen clearly in the following table:

Table 2: The improvement the students' Fluency

Indicator	Mean score		The Improvement
	Pre-test	Post-test	
Fluency	1.65	4.25	2.6

The table 2 above indicates the significant improvement of the students' fluency. The mean score of fluency in pre-test is categorized as poor (1.65). The mean score of fluency in post-test is categorized as good (4.25).

Therefore, the use of Predict-Explain-Observe-Explain method in teaching and learning process can improving the students' fluency in pre-test and post-test. The students' achievement in post-test is greater than in pre-test (4.25 > 1.65).

3. The Improvement of the Students' Speaking Ability

The use of Predict-Explain-Observe-Explain in improving the students' speaking ability deals with accuracy and fluency. The improving of the students' speaking ability dealing with accuracy and fluency can be seen clearly in the following table:

Table 3: The improvement the students' Speaking Ability

No.	Variable	Mean score		The Improvement
		Pre-test	Post-test	
1.	Accuracy	1.82	4.08	2.26
2.	Fluency	1.65	4.25	2.6
3.	$\sum X$	3.47	8.33	4.86
4.	$\overline{X}$	1.73	4.17	2.43

The table 3 above indicates that the mean score of pre-test, accuracy is greater than fluency (1.82 > 1.65b). The mean score of post-test, fluency is greater than accuracy (4.25 > 4.08). The table above also indicates the significant improvement of the students' accuracy and fluency. The mean score of accuracy in pre-test is categorized as poor (1.82). The mean score of accuracy in post-test is categorized as good (4.08). The mean score of fluency in pre-test is categorized as poor (1.65). The mean score of fluency in post-test is categorized as good (4.25).

Therefore, the use of Predict-Explain-Observe-Explain method in teaching and learning process can improving the students' speaking ability in pre-test and post-test. The students' achievement in post-test is greater than in pre-test (4.17 > 1.73).

4. Mean score and standard deviation of tests in Speaking Ability

Table 4: The mean score and the standard deviation of tests

Kind of Test	Mean Score	Standard Deviation
Pre-test	3.48	1.47
Post-test	8.32	1.43

Table 4 above shows that the mean score of pre-test is 3.48, and that of the post-test is 8.32. It means that the mean score of the post-test greater than that of

the pre-test. It means that the students could improve their speaking ability after treatment. The standard deviation of the pretest is 1.47 which greater than he standard deviation of the post-test, 1.43, but almost equal.

5. Hypothesis Testing

In order to see whether or not there is a significant difference between the result of the pre-test and post-test of the students, the t-test was to be applied. The test variables (pre-test and post-test) are statistically different on alpha level (@) = 0.05, at the degree of freedom (df) N-1 = 34. To see the difference, look at table below.

Table 5: Hypothesis testing

Variable	t-test value	t-table
$X_2 - X_1$	26.88	2.045

Table 5 above indicates that the value of the t-test (26.88) is greater than the value of the t-table (2.045). It means that there is a significant difference between the result of the pre-test and post-test of the students. Seeing the result above it can be concluded that the null hypothesis (H_0) is rejected whereas the alternative hypothesis (H_1) is accepted. In other words, the use of predict-explain-observe-explain can improve the students' speaking ability.

Conclusion

The result of the data analysis through speaking test showed that the students' speaking ability in terms of accuracy and fluency improvement significantly. The mean score of the students in pre-test is 1.73 that is classified as poor and post-test is 4.17 that is classified as good. Those score got from the result of the students' accuracy and fluency.

a. *The students' accuracy at the eleventh year of SMA Batara Gowa through Predict-Explain-Observe-Explain method.*

The indicator of pronunciation of the students' accuracy in pre-test have improvement from post-test. The improvement can be seen after testing. The students' pronunciation improved which improvement 1.86 and the students' mean score is 3.94 that is classified as good.

The indicator of vocabulary of the students' accuracy in pre-test have improvement from post-test. The improvement can be seen after testing. The students' vocabulary improved which improvement 2.4 and the students' mean score is 4.17 that is classified as good.

The indicator of grammar of the students' accuracy in pre-test have improvement from post-test. The improvement can be seen after testing. The students' grammar improved which improvement 2.52 and the students' mean score is 4.14 that is classified as good.

b. *The students' fluency at the eleventh year of SMA Batara Gowa through Predict-Explain-Observe-Explain method.*

The students' fluency in pre-test have improvement from post-test. The improvement can be seen after testing. The students' fluency improved which improvement 2.6 and the students' mean score is 4.25 that is classified as good.

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Language Learning Skills Strategy based on Local Wisdom

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ABSTRACT

Learning strategy is a deliberated and planned effort that it was carried out by someone to achieve the desired objectives resulting in better behavior change which is influenced by internal (human) and external factors (material, facilities, equipment, and procedures). The use of innovative strategies can create a conducive learning situation. Learners in this regard directly involved in absorbing information and restated the recording information obtained in accordance with the ability of individual learners. Through a dynamic learning process is expected to create a form of verbal communication between learners with learners patterned through the skill of listening, speaking, reading and writing so that the learning atmosphere could avoid saturation. This paper aims at describing language skills learning strategies based on local wisdom. The focus of the study in this paper is the first learning strategies language skills. The second is language skills based on local wisdom. Reading skills on local wisdom-based as well as listening skills by using folklore as reading material. Speaking and writing skills based on local wisdom can be designed to make the Buginese Makassarese culture as a central theme in charge of speaking and writing materials.
Keywords: learning strategies, skills, and local wisdom-based.

Introduction

The existence a variety of learning are expected to evoke the spirit and activity of students in learning, so students can achieve the competencies specified in the curriculum. Language learning needs to give much attention to the principles of teaching. It is expected in order to the learners can receive language learning in accordance with the development of physical, psychological, the socio-economic conditions, and in accordance with their characteristics.

The learning principle should be started from the easy to the difficult, from the near to the distant, from the simple to the complex, from the known to the unknown, and from the concrete to the abstract. That is the main purpose of the Indonesian language learning can be directed to improve the ability of learners in communicating with Indonesian, which covers oral and written. The learners have a wide variety of characteristics in accepting a lesson, therefore teachers should be able to catch or read what they want to learn during learning activities take place. Media, facilities, and infrastructure are required to facilitate the learning process. The success of teaching depends on various elements, including elements of arranging lesson planning, learning implementation, and teacher's competence (ability). Planning prepared must be in accordance with existing guidelines.

Learning implementation must be in accordance with the planning that has been arranging in the lesson plan. Moreover, the teacher should have competence (ability), which includes the ability to master and deliver teaching materials, managing a classroom, selecting, using teaching aids and props, write and use appropriate

teaching methods, and carry out assessment properly and professionally. Teachers should be able to determine those constraints.

Language plays an important role in human life because language is a communication tool in everyday life. With language, one can convey ideas, thoughts, feelings or information to others, both orally and in writing. This is consistent with the idea that language is a means of communication among the community in the form of a symbol of the sound that it produced by the human vocal organs. Language is used in most human activities, without any human language we cannot express feelings, expressed the wish, give advice and opinions, even to the extent of thinking.

The use varied methods and techniques that are expected not to saturate and monotonous in presenting the subject matter. Using various techniques and innovative strategies can create conducive situation learning. Learners in this regard directly involved in absorbing information and restating the recording information which is obtained in accordance with the ability of students individually. By dynamic learning process is expected to create a form of verbal communication between learners with learners who patterned through listening skills, speaking, reading and writing so that the learning atmosphere could avoid saturation in teaching and learning process.

Discussions

Definition of Learning Strategy

Literally, the strategy is an outline of the reference to action in an effort to meet the targets. Learning strategy is the policy chosen by the teacher to achieve the learning objectives. According to J. R. David (in Sanjaya, 2006: 126), the learning strategy can be interpreted as a plan that contains a series of activities designed to achieve specific educational objectives.

Mulyasa (2005: 225) says that learning is a process of interaction between learners with its environment resulting in a change of behavior towards the better. In interaction, there are many factors that influence it, both internal factors that come from individual itself and external factors that come from the environment.

Hamalik (2006: 162) says that learning is a process of interaction between students and teachers in an effort to achieve the goal of learning, which takes place in a specific location within a certain time anyway. Kleif (Jamaluddin, 2003: 75) which says that the process of experiential learning because of permanent natively changes in behavior that cannot be explained and stated the same thing by a temporary state or innate response tendencies.

Learners are human resource development efforts should be done continuously for human life (Haryati, 2007: 183). Due to take place continuously throughout life, the content and the learning process needs to be up date accordance to the progress of science and culture of the community. According Reigeluth (Usman, 2005: 110) "learning as knowledge construction, is based on the idea that learning occurs. When a learner actively constructs a knowledge representation in working memory,' learning is the process of formation of science, this principle is based on an idea that learning occurs when someone learners are actively engaged in the formation / building of new knowledge in memory.

Based on some opinions above, it can be concluded that the strategy of learning is an attempt to deliberate and carry out by someone and interaction used to achieve the desired objectives resulting in a change of behavior better which is influenced by internal factors (human) and external factors (material, facilities, equipment, and procedures).

1. Learning strategy of Listening Skill

Listening skills is a form of receptive language skills. At the time of the learning process, these skills are clearly dominating the student activity than other skills, including speaking skill. However, these new skills is recognized as a key component in learning the language in the 1970s were marked by the emergence of the theory of Total Physical Response (TPR) of James Asher, The Natural Approach, and its Silent Period. The third theory states that listening is not a one-way activity. The first step of the activities is the process of listening skills psychomotor to receive sound waves through the ear and sends impulses to the brain. However, this process is just the beginning of an interactive process when the brain reacts to impulses had to send a number of cognitive and affective mechanisms are different.

According to Brown (1995) there are eight processes in listening activities, namely:

a. Listening to process raw speech and save the image of him in short term memory. This image contains phrases, clauses, punctuation, intonation and stress patterns of words from a series of talks that he had heard;
b. Listeners in any event determine the type of speaker being processed. Listeners, for example, must determine whether the talks had returned in the form of a dialogue, speeches, radio broadcasts, and Iain else and then he interpret the messages he has received;
c. Listeners looking for purpose and objective of the speaker by considering the shape and type of speech, context, and content;
d. Listeners to recall some background information (through a scheme which he had) in accordance with the existing context of the subject matter. The experience and knowledge will be used in forming cognitive relationships to provide the proper interpretation of the message delivered;
e. Listeners looking for the literal meaning of the message he heard. This process involves semantic interpretation;
f. Listeners determine the intended meaning;
g. Listeners consider whether the information he receives must be stored in its memory or delayed;

2. Learning Strategy of Speaking Skill

According to the flow of communicative and pragmatic skills of speaking and listening skills are strongly related. Verbal interaction is characterized by routine information. Another feature is the need for a speaker to associate meaning, to devise interaction; who should say what, to whom, when, and on what. Conversational skills requires minimal understanding of the speaker in a sentence.

As is known, the selection strategy or combination of methods and techniques of learning is mainly based on objective and material that has been assigned to the units of learning activities. In terms of the intellectual-emotional involvement of

learners can be trained in activities such as: play a role; various forms of discussion; Interview; storytelling (self-experience: life experience, the experience of reading,); speech; oral reports; reading aloud; recording speech; play drama. In the teaching strategies, the use of some techniques is seen as more advantageous than just using one technique. While in terms of approach, the approach used varies between controlled and free approach. Both of these approaches can be applied to a number of techniques, for example:

1) Speaking of guided: phrases and sentences; paragraph unit; dialog; poetry readings.
2) Speaking of semi - guided: reproduction of the story; serial story; construct a sentence in the talks; reported the content of reading orally.
3) Free Speaking: discussion; drama; Interview; speech; play a role.

3. Learning Strategy of Reading

Reading skills are generally obtained by study it in school. This language skill is a skill that is very unique and important role for the development of knowledge, and as a communication tool for human life. Said unique because not all human beings, despite having the reading skills, able to develop a tool to empower him or even making culture for themselves. It is important for the development of knowledge for the highest percentage of knowledge transfer which is done through reading. Teaching reading should pay attention to regular and habitual ways of thinking well. This is due to read as a very complex process, involving all of the higher mental processes, such as memory, thought, imagination, regulation, implementation, and troubleshooting. Mackey (1965) looked at the relationship between readings from language teaching as "Although this involves the language nor listening to speaking it, reading is an important means of maintaining contact with a second language".

Reading instructional strategies grow quite rapidly, traditional techniques are still used by most teachers. Habits teacher asks the learners to read the text for a certain time, then ask questions like what kind of text they have read? Who is the author? When did they make? Why? How? Who? The whole question is still done because it is relevant to the demands of reading skills for learners. Another learning strategy is to use the techniques of duty. The task of reading at home is a relatively more freely. The demand for the skills required was higher due to differences in the duration of the read. In addition to be able to answer traditional questions above, students should also be able to make a summary of what he reads. There are still many other strategies to improve reading skills, also including reading literary works.

4. Learning Strategy of Writing Skill

Writing activity is a form of manifestation of abilities and language skills most recently held by language learners after listening skills, speaking, and reading than three other language skills, the ability to write more difficult to master even by native speakers of the languages concerned. This is due to the ability to write requires mastery of various linguistic elements and elements outside the language itself will be the content writing. Both elements of the language and content of elements must be established to produce a coherent and cohesive writing.

Nurgiyantoro (2001) argues that the assessment made against the student essay

usually holistic, impressive, and briefly, the intention is that ratings are bears a whole based on the impression gained from reading the essay briefly. Such assessment if performed by several experienced experts who indeed, to some extent, can be accounted for. However, it is not necessarily the expertise possessed by the teachers at the school. In connection with the assessment arrangements, following several criteria:

1) The quality and scope of content;
2) The organization and presentation of the contents;
3) Composition
4) Cohesion and coherence
5) styles and forms of the language;
6) mechanics: grammar, spelling, punctuation;
7) neatness and cleanliness writing; and
8) The teacher affective response to the paper.

2. Language Skill Based on Local Wisdom

a. Listening Skill Based on Local Wisdom

Listening skills is an exciting action that it heard and targets in the form of sounds. Listening is one way to hear and accept the feelings and responses aimed at showing that the person really had feelings (Syamsuri, 2013: 17). Listening skills are needed to be owned by each person so that in communicating it will go more smoothly and can distinguish between listening and hearing. Sub teaching materials based on local wisdom listening skills is to use folklore as cargo in listening activities. Folklore is a story that comes from the community and develop in society in the past that characterizes each nation has a diverse culture, which includes a rich culture and history of each nation. In general, the folklore tells of an incident in a place or origin somewhere. The characters that appear in folklore generally expressed in the form of animals, humans and gods.

b. Speaking Skill Based on Local Wisdom

Speaking skills is one aspect of language skills that is productive, meaning that a person has the ability to communicate ideas, thoughts or feelings that ideas exist in the mind of the speaker can understand other people. Speaking means express ideas or actively spoken message through symbols sound communication activities to occur between the speakers and hearer. Indeed, everyone predetermined to be able to talk or communicate verbally, but not all have the skills to speak properly. Therefore, speaking lessons should get more attention in the teaching of language skills in primary schools. Speaking defined as the ability articulation utter sounds or words to express, express and convey thoughts, ideas, and feelings (Hanafi, 2009: 45). It can be said that talking is a system of signs that can be heard (audible) and visible (visible) that utilizes a number of muscles of the human body for the purpose and destination of ideas combined. Sub teaching materials based on local wisdom speaking skills using cultural themes of Makassarese Buginese society as a charge material in talking. This design is related to previous skills ie listening skills. Results of gathering folklore can be retold with its own language by observing the vote in the speaking skills like pronunciation, expression, intonation and tone.

c. Reading Skill Based on Local Wisdom

Reading is an act of communication that is the thought process that involves the idea, reality, and the feelings conveyed by the author to the reader via an

intermediary language symbols (Hanafi, 2009: 143). Reading is a process of formation and meaning interaction between readers with reading materials or processes that build bridges between the material read with background experience of the reader (Anderson and Pearson in Hanafi, 2009: 23). Thus, reading skills can be summarized as activities to spell or pronounce the writing was preceded by activities to see and understand the text. Activities to see and understand is a process that simultaneously to find the message or the information in writing. Requires a process that requires an understanding of the meaning of words or sentences that constitute a unity upon first glance. Strategies based on local wisdom reading skills as well as listening skills by making use of folklore as reading material. For example, folklore that is chosen is folklore DariLa Maddukkelleng. The reasons for selecting the same story based on the theory that the four language skills, closely related to learning.

d. Writing Skill Based on Local Wisdom

Writing skills is one type of language skills that must be mastered students. Many experts have put forward the notion of writing. According Zuhdi (Hanafi, 2009: 59) the skill of writing is a skill poured thoughts, ideas, opinions about anything, in response to an expression of interest, or the disclosure of feelings by using stationery discussed. Munirah (2015: 4), that the writing is lowered or symbols depicting a graph depicting a language understood by someone, so that others can read the chart symbols. Writing skills is the ability to express ideas, opinions, and feelings to another party through a written language. The accuracy of the disclosure of the idea should be supported with the precision of the language used, vocabulary and grammatical and spelling usage. Writing skills teaching materials based on local wisdom can be designed to make the Buginese and Makassarese culture as a central theme in charge of writing. To facilitate students in writing, the vocabulary can be used as a basis for making sentences. Example Vocabulary Local Wisdom Buginese and Makassarese are as follows:

No	Vocabulary		
	Local Language	**Indonesia**	**English**
1	Siri	Malu	Shame
2	Pacce	Pedih	Poignant
3	Sipakainga'	Saling mengingatkan	Mutual remind
4	Sipakatau	Saling menghargai	Respect
5	Tudang Sipulung	Duduk bersama	Sitting together
6	Tabe'	Permisi	Excuse

Another example in learning the skills to write a paragraph that is using the philosophy of Buginese Makassarese as the main idea in the framework of paragraph writing. There are many philosophies Buginese Makassarese that has a very deep meaning and can trigger scholarship in creative thinking. Buginese on some philosophies that can be developed into paragraphs, namely:

a) Kuallenagi tallanga na toalia (better sinking of the receding in the beach)

b) Mali 'siparappe Tallang sipahua (Mutual help when it fell)
c) Reso tamanginggi naletei pammase puang (Work hard, persevere and never give up, then certainly successful will be achieved due to the grace of God to pursue a path of success).
d) Tea Tamakua idipanajaji (your success depends on your own).
e) Taro ada Taro Gau (What was said is what is done).

Conclusion

Learning strategy is a deliberated and planned effort that it was carried out by someone and interaction to achieve the desired objectives resulting in better behavior change which is influenced by internal (human) and external factors (material, facilities, equipment, and procedures). The Listening skill strategy is identification, which refers to identifying and selecting without retention; .identification and directional selection with short retention; identification and selection with retention and learners demonstrate understanding. Speaking learning strategy refers to the principle of stimulus-response. During these two variables are controlled by the speaker, then he can be categorized as having the ability to speak.

Writing skills requires mastering various linguistic elements and elements outside the language itself will be the content writing. Both elements of the language and content of elements must be established to produce a coherent and cohesive writing. Another learning strategy is to use the techniques of duty. The task of reading at home is with a relatively more freely. The demand for the skills required was higher due to differences in the duration of the read. In addition to be able to answer traditional questions above, students should also be able to make a summary of what he reads. The ability to speak, and the ability to write to rely on language skills that are active and productive. Both language skills is an attempt to express thoughts and feelings that exist in a user language through language. The difference lies in the means used to express them. Thoughts and feelings in talking disclosed orally, whereas. Delivery of messages in writing made in writing. Differences in how to deliver these messages are marked with different characteristics and different demands in its use. Those differences will certainly also reflected in his teaching, including the organization of language tests. Reading skills based on local wisdom as well as listening skills by making use of folklore as reading material. Writing and speaking skills based on local wisdom can be designed to make the Buginese Makassarese culture as a central theme in the materials of writings and speaking.

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Suggestopedia Method in Language Learning

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ABSTRACT

The success and the success of someone to get a social privilege and to a certain extent depend on the ability to speak in conveying his thoughts or ideas. On other words, the person who is able to communicate a partly from the poverty. Language represents the nation, the language showed social status, poor or rich, elite or marginal, and so on. In language learning are cornerstones judgments on using method. It is because the method determines the content and how to teach the language. Once, the approaches and methods are important in the process of teaching and learning activities in high school. Therefore, in this paper I will discuss one of the existing language learning methods, the Suggestopedia method is correlated and operationalized in Indonesian language learning in schools. Suggestopedia method is from Bulgaria and was first developed by an educator, psychotherapy, and physicist named George Lozanov around 1978. This method tries to take advantage of the effects of irrational and diverts and directs to optimize learning. Suggestopedia is a set of recommendations learning derived from suggestology, which intended by Lozanov as a science of the study of applying to the effects that are not rational or conscious who are constantly taken up by human beings.

Keywords: Methods, Suggestopedia, Language Learning

Introduction

The success and the success of someone to get a social privilege, to a certain extent depend on proficiency in delivering real fruit of his mind. In other words, person who is able to communicate that apart from poverty. Language represents the nation, the language showed social status, poor or rich, elite or marginal, and so on. The ability of a student in mastering the language that will be used as the main capital in achieving the purpose of the above, one of which is highly dependent on how the approaches and methods of teaching conducted by the teacher concerned when the learning process takes place.

Approaches and teaching methods that teachers will affect the admissions will be the material presented. Conformity condition, good facilities, psychological conditions, (affective, cognitive and psychomotor) as well as the environment is concerned pupils with learning approaches and methods performed by a teacher will be able to make the students capable of capturing the subject matter in accordance with the expectation that learning. In language learning, a barometer of his success is his judgment in terms of the method used, because the method which determines the content and how to teach the language.

Once, the approaches and methods are the importance of in the process of teaching and learning activities in schools. Therefore, in this paper I will discuss one

of the existing language learning methods, the method Suggestopedia to be correlated and operationalized in Indonesian language learning in schools. Suggestopedic method comes from Bulgaria. This method firstly developed by an educator, psychotherapy, and physicist named George Lozanov about 1978. Lozanov believes that relaxation techniques and concentration will help the students open their subconscious resources and acquire and master the vocabulary more quantity and the structure is more stable than they think (Tarigan, 2009: 88).

Lozanov basing this method in various disciplines such as yoga, classical music, parapsychology, and ontogenetic therapy, which supposedly can improve the learning speed of 5 to 50 times that of the ordinary. Through the practice with special techniques, the students may be possible to develop and learn the super memory quantity is greater language materials in a very short time.

The Definition of Suggestopedia Method

Suggestopedia is set on learning derived from suggestology intended by Lozanov as a science of the study of applying to the effects that are not rational or conscious who are constantly taken up by human beings (Stevick in Richards & Rodgers, 2006: 100, Tarigan, and 2009: 89). This method tries to capitalize upon influences irrational and divert and directs to optimize learning. The characteristics of the most striking Suggestopedic is (Tarigan, 2009: 89):

1. Decorating class;
2. The furnishings / furniture grade;
3. Preparation / classroom setting;
4. The use of music;
5. Actors' authoritative teacher.

Lozanov said that no one else in the sector of public life that does not utilize suggestology (Richards & Rodgers, 2006: 100, Tarigan, 2009: 89). Therefore, this suggestology learning demands are very dramatic. Furthermore, Lozanov said in learning the method Suggestopedic seemed to speed up 25-fold from the study conducted premises conventional method (Richards & Rodgers, 2006: 100).

Understanding this Suggestopedic method as a theory seeks to give attention to how, manipulated to optimize learning and memory. A number of researchers are working to identify optimal mental statements that provide convenience for memorization and recall. One striking characteristic Suggestopedic method is convergence of music and rhythm of the music for learning. Thus, Suggestopedic have ties with family and with the use of other functional music, particularly the therapy. Gaston (Richards & Rodgers, 2006: 100, Tarigan, 2009: 91) suggests as well as limiting the three functions of music in therapy, namely:

1. Providing convenience for the establishment and maintenance of personal relationships;
2. Generate improved self-esteem through increased self-satisfaction in the musical performances;
3. Using a unique rhythm potential to generate energy and cause of peace.

The function of the third item that is one item that is utilized by Lozanov in the use of music to make the learners relaxing besides giving structure, exemplary, and explanations linguistic. Suggestopedia presentation of the material was developed to help the students shake the feeling that they will fail. Thus helping they reduce

obstacles and barriers in learning. Lozanov believe that language learning can take place in a speed higher than that taking place as usual. He asserted the ineffective us is that we hold various kinds of psychological barriers for learners, so we did not use the full force and intact that we have.

Suggestopedia Method in America

Lozanov's method has received attention from experts how education and teaching in America. However, not all principles Suggestopedic used in Bulgaria can be used in America. Research in the United States more focused on the elements of Lozanov method than Lozanov method as a whole and on the variables included in the meeting held in class (Tarigan, 2009: 137). Lazanov method for implementing this effectively, there are at least three elements that are considered essential, namely (Tarigan, 2009: 137):

1. Classes are attractive, interesting and pleasant classroom atmosphere and refreshing;
2. The teacher is impersonal dynamic that is capable of playing the role of the material well and can encourage students to study hard
3. A state of preparedness relaxing on students obtained with, among others, physical exercises to relieve boredom and reduce physical tension; exercises to calm the mind; deep and rhythmic breathing to increase the concentration of presenting the material in accordance with the rhythmic background music.

In order to use Suggestopedic the American academic atmosphere, changes need to be held. By definition, a program that is suitable and appropriate language for the people of Bulgaria cannot be used for an American student (Tarigan, 2009: 139). Games, sketches, and activities generally relies on preexistences American class programs and the innovative talent American teacher or researcher.

The main contribution to American researchers for the development of this method is the transformation Suggestopedic Bulgarian system designed for teaching intensive language courses to be something in accordance with the teaching of various subjects in situations of normal American school. More specifically, American researchers have established a steady chart for relaxation procedures used in the classroom learning. Through words and gestures, American teachers began to form and establish a positive atmosphere and suggestive that the students understand that effective learning will produce an enjoyable experience.

The Approach in Suggestopedia Method

Suggestion is the heart Suggestopedic. In many ways and for many people, the suggestion actually conjure up visions of a sharp gaze, cradle of view wistful, and commands hypnotist repeated monotonously. Lozanov recognized the possibility of association for Suggestopedic, but in his own opinion divides Suggestopedic of clinical hypnosis narrow concept as a kind of statement static consciousness, like sleep, and can be changed (Tarigan, 2009: 93). Further Lozanov confirms that distinguishes the model of hypnosis and other forms of surveillance mind and memory of others is that other forms of the shortage of flavour suggestion desugestif suggestive and failed to create an establishment that is constantly backed up via psycho-relexition that concentrative (Tarigan, 2009: 94).

There are six important theoretical components which can be regarded as a operation place of disgust and suggestions as well as an entrance for the reserves, as follows (Richards & Rodgers, 2006: 101-102, Tarigan, 2009: 94-97):

1. The authority, prestige, authority (Authority). People will be very easy to remember and will be greatly influenced by information coming from authoritative sources, from a reliable source.
2. Infantilization childishness. Authorities also used to suggest a relationship between teachers and students as the relationship of parents with their own children. In the role of this child, the learners took part in role-play, games, singing, gymnastics and exercises that help students.
3. Source of double (Double-planeness) .Sang learners not only learn from the direct influence of teachers but also of the environment in which teaching was taking place. Class decor cheery background music, shapes and pieces of chairs, and a private teacher is considered as important in teaching with the form of teaching itself. All are dual sources that contribute to improving and strengthening learning outcomes desired by teachers and learners.
4. Intonation, rhythm, and pseudo-passive concert. Various tones and rhythms that accompany the material presented helped avoid and eliminate the tedium and boredom through the monotony, repetition, and dramatizing and interpretation of linguistic material.

Good intonation and rhythm are coordinated with background music. Background music helps persuade and induce a relaxed attitude, which by Lozanov referred to as pseudo-passive concert (Richards & Rodgers, 2006: 102, Tarigan, 2009: 96). Condition and is perceived as an atmosphere that is optimal for learning, and things that strain is eliminated and the power of concentration for the new material is increasing. Because music is a central role in learning Suggestopedic made sense that it gets more attention explicitly. The kind or type of music is critical for successful learning. The idea that music can affect our body and mind is certainly not a new thing. The key is getting the right kind of music for the right kind of influence, which is desirable. If it does not meet the pattern of unwanted, undesirable changes in the nature of consciousness that will not happen and the result is certainly ugly and disappointing.

Lozanov (Tarigan, 2009: 96) recommends a series of slow movements (60 pulsations in a minute) in the 4/4 tones for a concerto-baroque concerto, coupled together into a concert which takes approximately half an hour. He noted that concerts like that, the body becomes relaxed, the mind becomes sharp and standby (Ostrander in Tarigan, 2009: 97). Free presentation of the material to be studied in rhythm patterns adapted to the rhythm. Suggestopedic method uses the last eight seconds of the measurement data at break times slower. During or after the first four rounds of the pulsations are silence. During the four pulses of the second, the teacher presents the material. Ostrander and her friend (Tarigan, 2009: 97) present a variety of events as to why the switch in Largo Baroque music proved

so potent. They noted that the rhythm of music affects the rhythms of the body, like a heartbeat.

Design Suggestopedia

Interest Suggestopedia method intended to convey a better conversation skills quickly and smoothly. Classes are held four hours a day, six days a week. The central focus of each unit is a dialogue which consists of about 1,200 words with a list of vocabulary and grammar comments. The dialog lists the dialogue-classified premises lexis and grammar. Apparently, this method demands basing learning on how the student's mastery of the vocabulary list of a couple very much, and certainly suggest to students that they need to achieve that goal for their own interests.

However, Lozanov (Tarigan, 2009: 99) emphasizes that the increased power of memory is not a separate skill, but is the result or consequence of positive stimulation and comprehensive personality. According Lozanov, the purpose of teaching is not memorization, but understanding and creative problem solving.

The Suggestopedia method learning syllabus lasted 30 days and consisted of 10 minutes of study. The classes are held for 4 hours a day, 6 days a week. On the first day, construction of new units, the teacher discuss the general content (not structural) dialogue that unit. The learners receive the text dialog with native language translations in parallel columns. The teacher answered every question interesting or associated with the dialogue. Then, the dialogue was read two or three times after the discussion to be steadier. The second day and the third day be used for the expansion of primary and secondary, the text. The expansion of the base consists of imitation, frequently asked questions, reading the dialogue, and the workmanship of all 150 new vocabulary items presented in the unit. Further expansion is an encouragement to the students to make combinations and new production based on dialogue. The story is parallel and in accordance with the read dialogues. The students are involved in the conversation and contribute little to give a response to the text that read it.

During the course, there are two opportunities to generalize the material. In the middle of the course, students are encouraged to practice the target language in a particular setting, such as in hotels or restaurants. At the end of the course, activities directed at the appearance that allows every student to participate. The students did a game based on the course material. Norms, rules, and roles was arranged neatly, but students were expected speak fairly in accordance with the situation, and not by rote. The role of the learner in this method is that the students voluntarily attend courses Suggestopedic, but in volunteer way that they are expected to obey the rules of class and all their activities. Mental attitude of the learners is critical to success, and that is why the learners should stay away from materials. It is because it may disturb the mind and other temptations and immerse ourselves in the method procedure. Students should never be thought of, manipulate or examine the material taught but must maintain an atmosphere of pseudo-passive which is the container of the material roll and infiltrate themselves. Ideally, groups of learners to create a situation which is a container that can be suggestible learners well and then presents the linguistic material such that it can encourage the creation of reception and

storage by the learner. Lozanov (Tarigan, 2009: 102) describes some of the behaviour of teachers that is expected to support the presentation are:

1. Indicate full confidence in the method.
2. Show the behaviour that is not easily satisfied in terms of manners and dress;
3. Arrange for appropriately and carefully observe the early stages of the teaching process; This involves selecting and viewing music and timeliness;
4. Maintain a serious attitude and earnest against that course; give and make tests and respond wisely to papers ugly;
5. Give the emphasis on global attitudes toward the material, not the attitudes of analytical;
6. Maintain enthusiasm polite.

The role of teaching materials in this method are expected teaching materials which consist of materials supporting direct, main texts and recordings, and indirectly supporting materials, such as the equipment remained in the classroom and music (Tarigan, 2009: 104). Textbooks should contain emotional power, quality letter, and attract attention. The use of language should be introduced in a way that does not distract students from learning content and does not confuse them. The themes of the traumatic and lexical material does not like or that give rise to hatred should be avoided (Lozanov in Tarigan, 2009: 104).

Although not closely related to the language, still learning environment plays an important role in Suggestopedic so important environmental elements that need to be taken into account as possible. Environment consists of class appearance, furnishings / furniture, and music.

The Procedure of Suggestopedia

Bancroft (Tarigan, 2009: 106) explains that language classes that lasted for 4 hours it has three distinct parts. The first part, we call oral review section. The materials studied previously used as a basis for discussion by teachers and twelve students in the classroom. All participants sit in a circle on their seats specially designed, built, and even then ongoing discussion resembles one seminar. This trial may include what is called the study of macro and micro studies. In micro studies, special attention devoted to the grammar, vocabulary and question and answer carefully. While the macro studies, emphasis is put on the role playing activities and a wider movement, innovative language constructions.

In the second part, the new material is presented and discussed. It consists of the activities check out a new dialogue and its translations in B1 and discuss any issues regarding grammar, vocabulary, content that is deemed by the teacher is important or who wants to be known by the students.

The third part, namely delivery of music is one of the characteristics that make Suggestopedic very famous. Lozanov (Tarin, 2009: 107) describes as follows: At the beginning of the meeting, all conversation stopped for a minute or two, and teachers listen to music that comes from the tape. He waited and listened in some sections or paragraphs in order to get into the mood or the heart of the music and then began to tell the new text. His voice was arranged so in tune with musical phrases. The students follow the text in their text that contains the translation of each lesson in their B1. Among the first

part and the second part, there is a pause or silence in the lessons for a few minutes. In some cases, even longer intervals can be provided to allow the students to move for a moment. Before the beginning of the second part, the learning, there is another pause a few minutes and a few phrases of music played back before the teacher starts to read the text. Now the students close their textbooks and listen to the reading teacher. At the end, the students quietly left the room. They were not told to do homework on the matter. Except one is expected to read text at a glance before going to bed and after waking up in the morning.

Philosophy of Suggestopedia Method

Stevick (Tarigan, 2009: 109) saw Suggestopedic based on:

1. Three assumptions, namely:
   a) Learning involves learners unconscious functions in addition to the functions of consciousness;
   b) That the person can learn faster than they usually do;
   c) That the learner prevented by: 1) the norms that society has taught us; 2) lack of harmony;
   d) failure to take advantage of all the power due to their laziness in most people most of the time
2. The three strategies, namely:
   a) Eliminate norms
   b) Eliminate tensions-tensions;
   c) Avoid the introduction of norms and barriers limiting the strain on their premises.
3. Three kinds of means, namely:
   a) Means of psychomotor;
   b) Means artistic;
   c) Means pedagogic.
4. Three types of criteria, namely
   a) The principle of ease and cheerfulness;
   b) The principle of unity of consciousness and type of consciousness;
   c) The principle of interaction suggestive.

The Characteristics of Suggestopedia

1. Learning given the ease in a relaxed environment and exciting.
2. Students can learn from that presented in the environment, even if attention is not directed to it (learning perihelia).
3. If the students trust and respect the authority of the teacher, then he will receive and remember information better.
4. The teacher should acknowledge that the learners will bring some psychological barriers into learning situations. He will attempt shortly disgust it.
5. Enable the imagination of the students will assist the learning.
6. The teacher seeks to increase the confidence of the students and himself that they are successful learners.
7. With this new identity that secure feeling increasingly high learners and make them more open.
8. Dialog students studied a language that they can use immediately.
9. If they attention regardless of the form of the language, and focused on the communication process, the students will learn better.
10. The teacher should integrate positively the suggestions directly into the learning situation.
11. The teacher should present and explain the grammar and vocabulary but do not dwell on it too long.

12. One way to make the meaning more clearly is through translation into the mother tongue (B1).
13. Communication takes place on two sides: on one side of the linguistic message is presented, on the other hand are the factors that influence the linguistic message.
14. Atmosphere pseudo-passive, such as when someone is listening learning atmosphere, it is ideal to overcome psychological barriers and gain satisfactory for teaching.
15. The distinction between the conscious and semi-conscious is unclear. Therefore, the optimal learning can take place.
16. Dramatization is a way to utilize the material life and directed. Fantasy remove obstacles to learning.
17. Pure Art allows suggestions to infiltrate into the subconscious. Therefore, art should be integrated as much as possible into the process of teaching.
18. The teacher should help students to use the material as possible.
19. Music and movement strengthen the understanding of linguistic material.
20. In the atmosphere of the play, the students' conscious attention is not focused on linguistic forms, but more likely on language usage
21. Mistakes are egregious, the emphasis is on content, not the form.

Top of Form

Bottom of Form

Conclusions

The ability of a student in mastering the language that will be used as the main capital in achieving the purpose of the above, one of which is highly dependent on how the approaches and methods of teaching conducted by the teacher concerned when the learning process takes place. Suggestopedia is learning a set of recommendations derived from suggestology intended by Lozanov as a science of the study of applying to the effects that are not rational or conscious who are constantly taken up by human beings.

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Technology & Management System of Education, Guidance & Counseling, Higher Education Policy:

Analysis of Management System of Modern Islamic Boarding School Research in Daar El-Qolam Islamic boarding School Tangerang Banten

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ABSTRACT

The purpose in this research is to obtain the description of modern boarding school management as a system with socio-cultural basis in Daar el-Qolam Islamic Boarding School. This research is a qualitative research with case study using a systems approach and using Miles and Huberman models Including the data reduction, display data, conclusion, and verification. Data collection for the study was carried out by means of interviews and observation towards several respondents i.e. principal, teachers, administrators, students, student's parents, principal family, and the office of Ministry of religion. The result of this research showed that management input system represented in the profile. That Daar el-Qolam Boarding School is adapts in profile. The process of management represented by dynamic, whereas Daar el-Qolam Islamic Boarding School is multiethnic in leadership pattern. The output of the system represented in management graduates and publics appreciation. Where Daar el-Qolam Islamic Boarding School on their life skills. The environmental management system of socio represented in culture, whereas Daar el-Qolam with multicultural has balance between religion achievements and general field of study including language skills.

Keywords: management, systems, socio culture.

Introduction

In historical records, the process of education and teaching in Daar el-Qolam begins with 22 students came from the families, relatives and intimates surrounding community schools. Now, after 46 years on the way, Daar El Qolam has become a modern educational institution with a format large boarding involving more than 370 teachers and approximately 5,000 students who come from many provinces of Indonesia, with a total area of 70 hentar predominantly ethnic Sundanese. The boarding school is able to develop into one of the largest cottage in Banten province which has branches in Rangkas Bitung in Bogor Banten and West Java. This has led the authors to examine the management of the boarding school Daar el-Qolam in order to understand the system that is in it.

In contributing to the community achieve Banten boarding school Daar el-Qolam Tangerang, Banten perform its role as a system through its own way. In this study the management of modern boarding school is explored through a systems approach, which discusses each of the components that include input, process, output and the system environment.

Method

This research is qualitative research with case study method. Robert K. Yin said that method qualitative haves five form:

1. Studying the meaning of people's lives, under real-world condition.
2. Representing the views and perspectives of the people (labeled through this book, as the participants) in a study.
3. Converting the contextual conditions within which people live.
4. Contributing insight into existing or emerging concepts, that may help you explain human social behavior, and.
5. Striving to use multiple sources of evidence rather than relying on a single source alone.

Result

1) Input

In particular, this study aims to gain an understanding of the practice management system by using a systems approach that includes input management system which was presented in the profile modern boarding school, a process management system is presented with the dynamics of modern boarding school, output management system that is presented in the form of graduate and appreciation society and the environment management system is presented in the form of socio-cultural trend boarding school setting.

This research is a qualitative case study method (case study) and data analysis using a modeling approach Miles and Huberman consisting of data reduction (data reduction), presentation of data (data display) and drawing conclusion or verification.

2) Process

a. regeneration manager is treated as a closed system that is taking a cadre of leaders from within the system, this will probably affect the process of inbreeding, which disrupt the development (growth) boarding school in the long term only emphasizes their order and regularity, the input is not receiving an input of energy from outside.
b. in terms of the process, the boarding is not yet a functioning system in an integrative way, because there are still programs that are not related as a system, each program is managed separately so that the quality of graduates as a whole does not reflect the unity of both attitudes, behaviors and skills that is traits typical boarding.
c. In this school had not yet seen the policy of resource distribution in accordance with the functions of its subsystems, for example, there is no priority allocation of resources in accordance with the vision to be achieved. Allocation of funds for teacher development was still very limited. Energy distribution is not functional, the principle of leadership that has great energy should really require a large allocation (does not occur in the distribution of financial welfare).
d. Rule and regulations are not clear, particularly in the application of managerial functions and academic, this is a threat that can cause the disorder (entropy) and can lead to malfunctioning of the system (resistance) which leads to catastrophe (damage), this occurs in bureaucratic rules are not functional.

e. Construction of complete infrastructure positive impact on interest guardians of students to send their children to boarding school, as evidenced by the increasing number of students in boarding school Daar el-Qolam.
f. Changes in curriculum based on the quality of schools run by the ministry of education and culture to improve achievement of students in the field of general knowledge, however, the general lack of teachers' involvement in leadership.

3). output

Based on the findings of the authors in the process of management of the boarding school Daar el-Qolam then, it has an impact on the management output boarding school Daar el-Qolam namely:

a. Because it is not yet a functioning integrated system, the output generated by the management process is different, so that graduates do not reflect the attitude, behavior and the same skills. Especially for graduates of their class excellent program is superior in the areas of knowledge and skills but are weak in attitude and behavior, this is because the management process is closed, causing its students to be exclusive, so make the gap between students of superior class with regular classes. Then, based on interviews with walisantri and direct observation to the field authors found that, the quality of language acquisition for students in class extension (takhossus) is much lower than the regular program especially excellent class. This is what makes the quality of graduates boarding school Daar el-Qolam look different from one another.
b. Output represented by alumni and public appreciation, alumni of the boarding school Daar el-Qolam Tangerang, Banten spread all these lines, there is a successful graduates working as civil servants and private employees. Trust parents to institute a boarding school Daar el-Qolam Tangerang, Banten who can educate their children to have the skills and good character is also an important value possessed by the institution.
c. For the standard of graduates, then boarding school Daar el-Qolam Tangerang, Banten follow the Ministry of Religious Affairs and also having to memorize the letters choice. In the case involving the local community in the activities of the boarding school Daar el-Qolam Tangerang, Banten form of activities of Islamic holidays, national and local culture. Output boarding school Daar el-Qolam Tangerang, Banten master general science, religion and skills, output spread to all lines, there are alumni who work but there are also children in school, so as to foster the trust parents seen from nutmeg alumni who have the skills to live in society.

4. Environment

Based on the findings in the field that, Environmental management Islamic Schools Daar El-Qolam Tangerang Banten located around the lodge Sundanese ethnic majority Muslim culture is very strong with students. From such a background (Islam-Sunda), associated with the achievement of students, almost every activity whether it is held in Tangerang,

Banten even national level Pesantren Daar El-Qolam Tangerang, Banten always involved.

Related social culture, people around the lodge here come too involved as a last example Taklim Assembly fathers and mothers. When Pesantren Daar El-Qolam Tangerang, Banten hold their usual activities involved. Any activities other than students, who became the next target is indeed also the community around the lodge.

Residents Pesantren Daar El-Qolam Tangerang, Banten often involved for religious activities such as warnings Islamic holidays and important events in Pesantren Daar El-Qolam Tangerang, Banten inviting official or national speaker. Thus, people around Pesantren Daar El-Qolam Tangerang, Banten has close Pesantren Daar El-Qolam Tangerang, Banten. One more thing that makes closeness to Pesantren Daar El-Qolam Tangerang, Banten is because the mosque located in the Pesantren Daar El-Qolam Tangerang, Banten it not only has Pesantren Daar El-Qolam Tangerang, Banten, but the mosque also belongs to the general public (public) so people often to pray at the mosque.

Community participation shaped religious activities, funding the construction of mosques around the boarding school Daar El- Qolam Tangerang, Banten. Daar boarding school in Tangerang, Banten El- Qolam there are children in the care of more than 100 people, all of which was assisted by the boarding school Daar El- Qolam Tangerang Banten by not closing the chance donors from outside. This time the boarding school Daar El- Qolam Tangerang Banten by the number of students approximately 5000 students already surplus in financing so it is not too hopeful with the help of benefactors, but if walisantri and the donaturs still given the opportunity to channel its aid.

There are no significant obstacles faced by the boarding school Daar El- Qolam Tangerang Banten far. Nothing to worry about, the cottage also not complaining, just that often the complaint is a problem of management of the boarding school Daar El- Qolam Tangerang Banten against the majority culture, Sundanese, until now have been used to it because it has been running 47 years so it is already connected with the people. Sundanese people are familiar with schools, barriers no longer exist. Once people hear the cottage still identify with traditional education fashioned and not up with the times. Now boarding school Daar El- Qolam Tangerang Banten has received recognition from the public as an educational institution that is modern advanced and able to compete with the top schools-seeded either the provincial level even at the national level.

However, at the beginning of the establishment of boarding school Daar El-Qolam Tangerang, Banten culture Sundanese people are not familiar with the model of a modern cottage, not like the people of Java, Madura. Sundanese people are more familiar with the madrasa just like in Padang Panjang. The Sundanese people are not familiar with modern boarding school, the Sundanese people familiar with the cottage salafiyah. Another obstacle Sundanese cleric and cleric still lacks specialists in general studies, although many of the private and public university graduates majoring in general. So, resistance is indeed related issues cottage tradition which is still not familiar with modern style for the Sundanese.

Then a constraint, too, was once a boarding school Daar El- Qolam Tangerang of Banten is located outside the city, but with the times and the rapid development in the city of Tangerang so that by itself the location of the boarding school Daar El- Qolam Tangerang of Banten is already included in the border region between two districts in the province of Banten. So with the existence of this boarding school Daar El- Qolam Tangerang Banten become more strategic because it is located in the middle of two districts in Banten province formerly geographically including the tip district in West Java province.

Discussion

Boarding school Daar El-Qolam Tangerang, Banten in question can be seen through the basic style of management action boarding school Daar El-Qolam Tangerang, Banten. John Obert Voll divide typology, basic style of action Muslims into four parts, namely: 1) adaptations, is leadership willing to make adjustments to changing conditions in a pragmatic habit; 2) Conservative, is the Islamic leadership considers the success of bringing the achievements that benefit the preservation or protection; 3) Fundamentalists, is the leadership of the Islamist group that really cling to the holy book in this case the Al-Quran and Al-Hadith uncompromising as the Wahhabi leadership; 4) Charismatic leadership following the personal charisma as Shiites. In line with the typology of the basic style of action leadership of the Muslim, the Pondok Pesantren Daar El-Qolam Tangerang, Banten views of the concerns of all community leaders on their environmental conditions at the time, namely the absence of Islamic educational institutions that such modern boarding school, especially in Tangerang and the surrounding areas so that people should be sending their children to Gontor in East Java for example if you want to get education schools. adaptions in the context of the title of this study means that the management wants to make adjustments to changing conditions in a pragmatic habit in the village Gintung - Tangerang, Banten.

Boarding school Daar El-Qolam Tangerang-Banten is explorative innovative views from the lodge development for the management of the boarding school opened as a branch of the cottage development efforts.

The dynamics of curriculum Pondok Pesantren Daar El-Qolam Tangerang, Banten is innovative because the current curriculum Pondok Pesantren Daar El-Qolam Tangerang, Banten is a combination of materials boarding school curriculum with the government curriculum. This means that in Pondok Pesantren Daar El-Qolam Tangerang, Banten apply 100% religious studies and general subjects as a whole so that the students of Pondok Pesantren Daar El-Qolam Tangerang, Banten able to compete at the Olympic level Mathematics and IPS up to the national level.

Boarding school Daar El-Qolam Tangerang, Banten views of strategy in realizing the vision and mission of nationalist-multicultural because of the vision and mission of one of them is taffaquh fi addin and rasikhiina fi il'mi, and it was used as a foundation, while the vision and mission that is related to learning rahmatan lil alamin. Management nationalist cottage like this is a construction of Islamic education process-oriented awareness of students and citizens

of other cottage insightful religiously pluralistic, multicultural sound simultaneously with multi-ethnic residents. Bantam models in schools like this one of the most expected by the public and the government can be positioned as part of a comprehensive and systematic efforts to prevent and combat juvenile delinquency with the concept of religious education for adolescents who are very unstable.

In addition, the Pondok Pesantren Daar El-Qolam Tangerang, Banten views of strategy in realizing the vision and mission of this emphasis on self-reliance because in running and implementing vision, mission, boarding schools have a strategy that is to equip the students with skills through extracurricular activities, so that later after taking of the boarding school they have the skills and creativity.

Boarding school Daar El-Qolam Tangerang, Banten views from the lodge's financial management every unit autonomous institution but remain below the units must be accountable for spending agencies to create and submit a report to the leader of the cottage.

Boarding school Daar El-Qolam Tangerang, Banten managed multiethnic. Establishment history pioneered by alm. KH. Rifa'i Ahmad Arief which is the first child of the deceased spouse. KH. Qosod Mansur and alm. Hj. Hind Mastufah, he graduated modern cottage Gontor Ponorogo, East Java. Residents of Pondok Pesantren Daar El-Qolam Tangerang, Banten ethnic mix ranging from leadership, faculty, administrative manager to learners, there are ethnic Sundanese, Javanese, Betawi, Lampung, Palembang, Batak, Padang, and others with socio-economic background of people old variety, farmers, civil servants, businessmen, fishermen, farmers and so on.

Boarding school Daar El-Qolam Tangerang, Banten managed multi-ethnic or multi-cultural more adaptive, more rationalist and more spacious cabin space for sale to the general public, so that the growth rate of the cottage both quantitatively and qualitatively more easily achieved. The root word multiculturalism is cultural. Etymologically, the word multiculturalism is formed from multi (many), culture (culture), and ism (flow / understand). Essentially, in the words contained recognition of the dignity of human beings who live in a community with each culture unique.

Thus each students in boarding school Daar El-Qolam Tangerang, Banten feel appreciated at once felt responsible to live with their community. The denial of a society to the need to be recognized is the root of all inequalities in many areas of life.

Islam taught in boarding school Daar El-Qolam Tangerang, Banten are friendly Islam, contextual, and appreciate the multicultural values in accordance with the teachings of Islam itself. KH. Ahmad Syahiduddin, as caretaker of Pondok Pesantren Daar El-Qolam Tangerang, Banten, is well aware of how Islam should have taken and grounded in the place that he teaches and preach Islam. KH. Ahmad Syahiduddin said that people around pesantren fosterage are people who are still happy with the arts, in many ways the model propaganda or symbols of Islam conducted by boarding is similar to the preaching of the walisongo, for example by using art as propaganda and greatness such as performing Nasyid, Musabaqoh Tilawatil Qur'an, Marching Band, Marawis, scouts and others. Activities that involve various elements of society around

the lodge was intended as a means of communication between the community and the public arena kemunikasi with schools and communities to get closer to the teachings of Islam.

KH. Ahmad Syahiduddin many provide ideas and insight in describing the multicultural values in Pondok Pesantren Daar El-Qolam Tangerang, Banten. It has made education and learning is good for the students, especially in the understanding of multicultural values. Students of Pondok Pesantren Daar El-Qolam Tangerang, Banten, either directly or indirectly, actually learns differently, how to address differences, to be democratic, and tolerant. Their muhadhoroh and discussion in Arabic and English, for example, is a form of learning that will hone students sensitive to the differences and learn how to react.

The existence of students who come from a variety of other areas, for example from Sumatera, Kalimantan, Sulawesi, Flores, Papua, and the other is its own style in the difference. They will learn to understand different cultures and how to live together in diversity. The phenomenon of the rise of Islamic thinkers who are often referred to as "liberal" of the Pondok Pesantren Daar El-Qolam Tangerang, Banten is interesting to be disclosed. Thought Gusdur and Amin Rais, who may in fact be said to be out of mainstreem culture addressed by boarding schools, either by the students or pesantren, KH. Ahmad Syahiduddin, as usual, and it is considered as a discourse.

Based on the description and discussion of the results of research that has been described above it can be concluded that in the field of education is actually difficult to say there is still a salaf pesantren (traditional) altogether, there is a mixed model between traditional and modern patterns. Islamic nature of this kind is suitable for the culture of Banten, because people of this area consists of various cultures, tribes and very complete with a difference. This condition is markedly practiced and voiced mainly in Pondok Pesantren Daar El-Qolam Tangerang, Banten.

Multicultural education Pondok Pesantren Daar El-Qolam Tangerang, Banten were highly correlated with the clerics as pesantren as actors. The ideas and insights kyais know Islam that is inclusive, moderation, tolerance and harmony to bring the school and his students obtained Islam friendly and rahmatan lil'aalamin, not Islamic radical and rigid against followers of other religions and also against the growing cultures around schools. Multicultural education is not specifically granted in the form of subjects or special studies at the school, but through a variety of opportunities and activities in schools.

Conclusion

From the analysis, the findings in this study can be summarized as follows:

1. Input is presented in the profile Pondok Pesantren Daar El-Qolam Tangerang, Banten, history Pondok Pesantren Daar El-Qolam Tangerang, Banten adaptasionis that is the adjustment of the existing conditions in Tangerang, Banten, focus filmed in the form of vision and mission of Pondok Pesantren Daar El- Qolam Tangerang, Banten is on skills through extracurricular more real, in terms of manpower education Pondok pesantren Daar El-Qolam Tangerang, Banten Gontor centric and cultured multiethnic, and of the state of the facilities, infrastructure curriculum

and learning, the Pondok pesantren Daar El-Qolam Tangerang, Banten strongly support the life skills, to financing sources Pondok pesantren Daar El-Qolam Tangerang, Banten, from tuition fees, students as well as from BOS assistance from the government and from the participation of people who are not binding, output standards nationally or government Pondok pesantren Daar El-Qolam Tangerang, Banten add the optional letters recitation of the Qur'an.

2. The process presented by the dynamics of Pondok Pesantren Daar El-Qolam Tangerang, Banten on leadership and financial management as well as its relationship with the coaching environment that is multi-ethnic cottage on the pattern of leadership but remained centralized in matters relating to finance, and not centralized on infrastructure because each unit has the responsibility and management of their own for all sectors by the leader of the unit.
3. Output presented at the graduate and appreciation, Pondok Pesantren Daar El-Qolam Tangerang, Banten distribution of alumni present in every line while on service in the community Pondok Pesantren Daar El-Qolam Tangerang, Banten focused on life skills.
4. Environment presented at the socio-cultural, Pondok Pesantren Daar El-Qolam Tangerang, Banten is located on the achievements of multicultural balance between public and religious fields of study plus in life skills including language skills.

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Proposed English Syllabus for Student Management of Borneo University Tarakan

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ABSTRACT

Since, there is not English syllabus were used by the lecturers and the existing materials are not in accordance with the needs and characteristics of the students. This research employed Research and Development (R & D) design; Richard' s model of course development to propose English Syllabus. To obtain the information needed as a base for writing English syllabus, 65 students were asked. A proposed syllabus was validated by two experts in syllabus design to check the appropriateness of the topics in the proposed syllabus. Further verification was conducted by trying-out the proposed syllabus involving the English lecturer of Management Department to make lesson plans based on the proposed syllabus. A set of validated syllabus for teaching English for Management Department students completed with the lesson plans for each unit. The proposed syllabus contains some aspects of both language skills and language components. The subjects being discussed using English are the topics related to the management study. All topics are presented in 13 weeks of three hours session. The format of syllabus consists of the following aspects: instructional objectives, topic, teaching and learning activities, learning experience, the assessment, the time allocation, source and media.

Key words: Proposed syllabus, Management Department.

Introduction

In Borneo University as the newest state university of Indonesia, there are seven faculties with fourteen departments including the Management Department of Economics Faculty. The English skills' teaching of listening, speaking, reading and writing were taken by all department students, and the students get the English for 2 semesters. Based on the data taken from preliminary study, it can be said that the present teaching English at second semester is not constructed by conducting needs survey or need analysis. Then it cannot be hoped that the students will have competence in English because the English lecturers taught the students based on his judge.

Teaching and learning of English at all semesters are under the authority, responsibility, management, and supervision of the Economics Faculty. Since, there is not English syllabus were used by the lecturers and the existing materials are not in accordance with the needs and characteristics of the students. The lecturer did not bring the materials that related to the students' needs and it made the students have low motivation to learn English as the instruction materials are not interesting for them and do not have any relationship with their field of study. It results in the process of teaching and learning English go to the wrong direction on the wrong track affecting the product to be less competence if does not want to be said incompetence, so it is necessary to propose English syllabus for students of Management Department of Borneo University of Tarakan. It must be developed based on the students' need by doing need analysis. The product of this research has a great significant contribution for my institution as a newest

university in north area of East Kalimantan, Tarakan city.

A syllabus is aimed at providing a course which gives a sense of directions to be effectively and efficiently run. A syllabus is defined broadly as a statement of any part of teachers overall plans converted in a classroom interaction for any part of curriculum. A syllabus is defined specifically as a document saying what to learn and is in a need to manage the course of instructional process to flow smoothly. A material to apply in the classroom teaching and learning is needed to find out if the syllabus is applicable.

Since a syllabus for English for Management is proposed, it should be systematically organized and sequenced such as sequencing the content, improving the learner's understanding and providing strategies to help sequencing units. Sequencing is the efficient ordering of content in such a way to help the learners achieve the objective (Morrison in Richard: 2001).

A syllabus is a specification of the content of a course instructional and lists what will be taught and tested (Richard, 2001:2). A syllabus design is the process of developing a syllabus. Curriculum development is a more comprehensive process than syllabus design. It includes the processes that are used to determine the needs of a group of learners to develop aims or objectives for a program to address those needs, to determine an appropriate syllabus, course structure, teaching methods, and materials, and to carry out an evaluation of the language program those results from processes. The syllabus design follow several steps; developing a course rationale, describing entry and exit levels, choosing course content, determining scope and sequence of course content, planning the course content(syllabus framework), and preparing for the scope and sequence plan (Richard, 2001:145).

Based on the fact of the nonexistence of the syllabus, English the syllabus for Management Department should be made. It is because the role of a syllabus is crucial to serve as guidance to proffer a sense of direction so that this course teaching can perform. The fact that English for Management under the teaching of English as a foreign language and English for Academic Purposes is needed to be put in the right proportion so that it is capable of providing its students with opportunities to optimize their project to be competent to some degree in English, especially in Management context.

Review of Related Literature

Syllabus

A syllabus is possibly defined as a document, an explicit and coherent plan, an instrument, or even a specification and ordering of content that describes and coordinates whole aspects of language teaching such as what learners expect to know at the end of the course; what is to teach during the course; when to teach and at what rate of progress; how to teach; and how to evaluate groups of learners (Yalden, 1987).

A syllabus has a significant role in teaching and learning process because a syllabus provides a focus for what should be studied by the learners and taught by the teachers. In other words, regardless of the approach a teacher adopts, she or he must plan and organize, and make decisions about what should be taught first, second, third, and so on.

Designs of Syllabus

There are some types of syllabus in language teaching. Kranhke (1987:10-13 proposed six designs of language teaching syllabus. Meanwhile, the following discussion will present modified view of the three syllabuses covered by, plus explanation of four other types of syllabuses that Brown (1995:7) has come across in his ESL/ EFL teaching and materials.

Structural syllabuses

According to McKay in Brown (1995:7), structural syllabuses focus on grammatical forms. Over years, a large number of textbooks and classroom materials have been organized in term of phonological and grammatical structure. The sequencing of structure is typically based on the idea of starting with easy structures and gradually progressing to more difficult ones. In some cases the sequencing start with the most frequently occurring structures and gradually move to the less frequently occurring ones.

Situational syllabuses

Situational syllabuses are based on the idea that language is found in different contexts, or situations. Consequently, the organization in a situational syllabus will be based on common situations like the following: at beach, at party, at an office, in a tourist shop, at the airport, at a theater, in a taxi, at a hotel, in a restaurant, and the like. The selection of situations is usually based on some feeling for likelihood that the students will encounter such situations.

Topical Syllabuses

A number of language texts are organized on the basis what might be called topical syllabuses. Topical syllabus are similar to situational syllabuses. However, they are organized by topics of themes, rather than situations. Typically, the topics are selected by the textbook author on the basis of his or her sense of the importance of the topics or themes to the lives of the students for whom the text is designed. This syllabus often includes such topics as divorce, single, parents, abortion, crime, terrorism, nuclear disaster, and so on.

Functional Syllabuses

This syllabus is designed to teach general English purposes, and be organized around language functions like seeking information, interrupting, changing a topic, saying good bye, giving information, introducing someone, greeting people, and the like. Authors select functions on the basis of their perceived usefulness to the students and then sequence them on the basis of some idea of chronology, frequency, or hierarchy of usefulness of the functions.

Notional Syllabuses

Notional syllabus is organized around abstract conceptual categories called general notions. General notions includes concepts like distance, duration, quantity, quality, location, size and so on. The type of materials organization is related to functional organization and on occasion serves as a general set of categories within which functions form subcategories.

Skill Based Syllabuses

A number of different skill based syllabuses have also emerged over the years. An author who uses a skill based syllabus organizes materials around the language or academic skills that he or she thinks the students will most need in order to use and continue to learn the language. for instance, a reading course might include such skills as skimming a reading for the

general idea, scanning a reading for specific information, guessing vocabulary from the context, using prefixes, suffixes, and roots, finding main ideas, and the like.

Research Methodology

According to Borg and Gall (1983) the purpose of educational research and development is to produce a finished product that can be used effectively in the educational programs. The purpose of this research is to produce an English Syllabus for Management Department of Economic Faculty, Borneo University. The appropriate research design for this research is Research and Development (R&D).

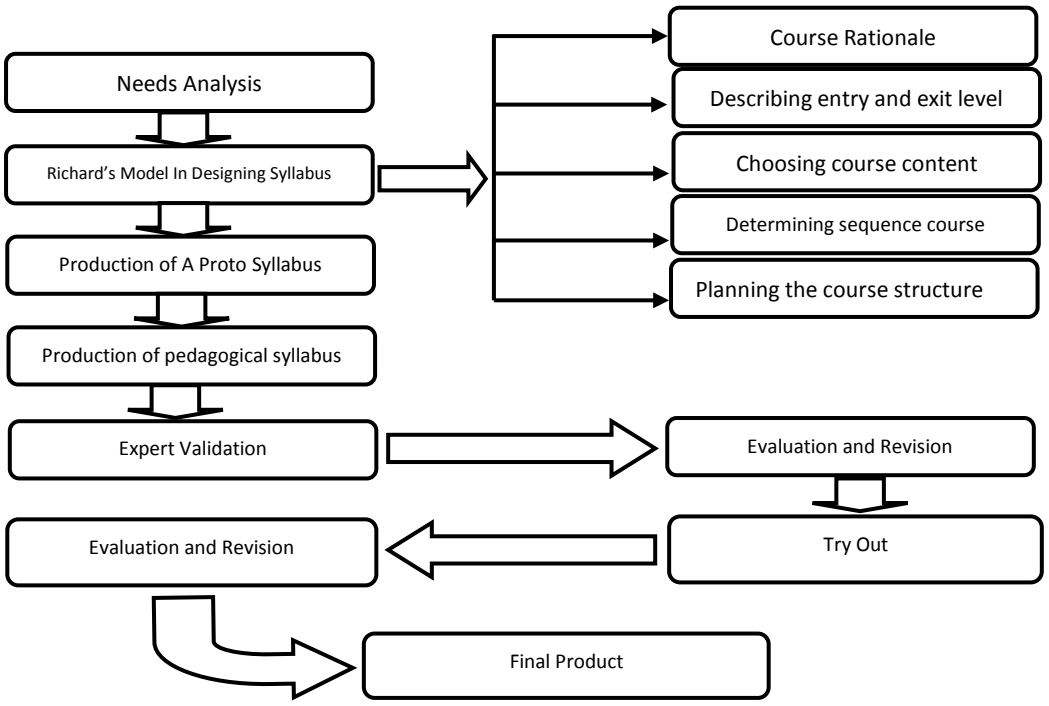

Figure 1. The Procedures of designing an English Syllabus for Management 2 (Adapted from Richard, 2001 and Yalden, 1987)

Needs Analysis

The result of the need analysis was beneficial to get information as the basis for the evaluation of an existing program, as the basis for planning goals and objectives for a future program, as a help with the selection of appropriate teaching methods in program, and most importantly as a basis for developing English syllabus for English course for students of Management Department of Borneo University.

Expert Validation

Validating is intended to get evaluation, suggestion and feedback from the experts in proposed syllabus design and in content subjects to assure the best quality of the product. It was done by giving the proposed syllabus and an instrument for

validation to the experts of syllabus designing.

Try-out

Having validated by the experts, the proposed syllabus and sample of instructional materials were tried out by lecturer. This activity was intended to check whether the proposed syllabus is clearly understood by her in terms of its language, format and its content.

Evaluation and Revision

To achieve the best quality of the proposed an English syllabus fort Management Department, the experts, in the field of syllabus design, are called for validating the proposed syllabus. After being validated by the experts, the syllabus is ready to be tried-out. Based on the weaknesses found in proposed syllabus, an informal conference was held to the English lecturer, the experts to share ideas to improve the syllabus.

Setting and Subjects

The setting of this research was conducted at S1 Management Department, Borneo University of Tarakan, with the consideration that the proposed syllabus is applied here. Before any needs analysis can take place, the researcher made certain fundamental decisions. Who will be involved in the needs analysis? What types of information should be gathered? According to Brown (1995: 37) states that there are four categories of people may become involved in a needs analysis: (1) the target group, (2) the audience, and (3) the needs analysts. Based on the clarification of people become involved in a needs analysis, the researcher divides the subjects in this researcher into several groups; (1) the target groups consisted of 65 students in this research are Management students, (2) the audience group is the English language lecturer. He was invited as the subject research because they involved in designing syllabus, and (3) the needs analysts is the experts who validated the educational product; proposed an English syllabus for Management Department. Some experts in English for syllabus designing to see the effectiveness of the syllabus.

The Instruments of Data Collection

The date were gathered in factual finding, that is, needs analysis, through the students, the English language lecturer, subject specialists, alumni and experts. In addition, there were four kinds of data that the researcher took, namely questionnaires, interview, and documents which were used to get factual information, and check list for expert validation.

Research Finding and Discussion

This chapter presents the analysis of data in needs analysis in proposing English syllabus for Management students of Economics Faculty at Borneo University Tarakan. The first question which is dealing with the objective of learning English, Table 4.1 indicates the respondents' choice on the objectives of learning English.

Table. 4.1 The Objectives of Learning English

Objectives	Number of Respondents	Frequency	Percentage
to listen the spoken language		7	10.14 %
to express the ideas in spoken form		16	23.18 %
to read the textbook and its manual		12	17.39 %
to express the ideas in written form		4	5.79. %
to prepare the TOEFL University.		10	14.49
to support the other subjects		5	7.24 %
to prepare for the work field		15	21.73 %
T o t a l	65	69	100 %

Concerning the objectives, the question was intended to find out the objectives that students want to achieve in learning English. There are 65 respondents who are asked to fill the questionnaires and number of frequency of their answer is 69. The result shows that most of students' objective in learning English is to express their ideas in spoken form (23.18%). While, the objective on reading textbooks and its manual instruction (17.39%) more than the objective of listen the spoken language (10.14%), to support the other subjects (7.24%), to prepare the TOEFL University (14.49%), and to express the ideas in written form (5.79%). Meanwhile, students stated that the objective of learning English is to prepare themselves for the work field (21.73%).

Table. 4.2 Topics on Proposed Syllabus

Topics on proposed syllabus	Number of Respondents	Frequency	Percentage
Leadership		21	27.27%
Supply and Demand		13	16.88%
Basic Business		13	16.88%
Marketing		15	19.48%
Social Responsibility of Business		15	19.48%
Other.		0	0%
	65	77	100

Concerning the proposed topics, the question was intended to find out the topic that students want to be discussed in learning English. There are 65 respondents who are asked to fill the questionnaires and number of frequency of their answer is 77. The result shows that most of topic that students want to discuss is leadership (27.27%). While, the topic on marketing and social responsibility of business is 19.48% more than the topics on supply and demand and basic business (16.88%). It can be revealed that they need topics that relevant with their field of study.

Those will influence of their interest and motivation in studying English.

The next question in questionnaires is the topics necessary to include in English for Management Department. Table 4.4 indicates the respondents' choice on the topics necessary to include English proposed syllabus for Management Department.

The next question in questionnaires is the students' interest in learning listening. Table 4.3 indicates the respondents' choice on the students' interest in learning listening.

Table. 4.3 The Materials in Learning Listening.

Instructional Material	Number of Respondents	Frequency	Percentage
Cassette (manual)		8	12.30%
Audio from CD(Compact Dish)		21	32.30%
Audio visual from CD		34	52.30%
Text read by English Lecturer		2	3.07%
	65	65	100%

Concerning the students' interest in learning listening, the students wants the listening materials is taken from Audio visual from CD (52.30 %), and 32.30 % of respondents want to have the listening materials are taken from Audio from CD. While, 12.30% of respondents want the listening materials are taken from manual cassette, and only 3.07% of respondents want to study listening through the text read by the English lecturer.

Table 4.4 The Students' interest in Learning Speaking.

Instructional Material	Number of Respondents	Frequency	Percentage
Problem solving		10	7.58%
Game		10	7.58%
Debate		5	3.79%
Expressing opinion		15	11.36%
Presentation		40	30.30%
Conversation		52	39.39%
	65	132	100

From the result above, it can be stated that speaking materials should be done into presentation and conversation activities, because they have a great chance to take part in conversation and presentation activities.

Table 4.5 The Students' interest in Learning Reading.

Reading Activity	Number of Respondents	Frequency	Percentage
Finding the main ideas		20	9.80%

Find the technical terms		29	14.22%
Questions and answer		50	24.51%
Find the synonyms of the words or phrases in the text.		45	22.06%
Find the specific and general information from the text		40	19.61%
Make a conclusion of the text		20	9.80%
	65	204	100

Concerning the students' interest in learning reading, from the result above, it can be stated that reading materials or reading activities should be done into finding the main ideas, finding the synonym, questions and answer, finding the synonyms of the words or phrases in the text, finding the specific and general information from the text and also making a conclusion of the text. All of the activities are beneficial for students in increasing students' competence in doing reading activities. It also is a strong recommendation to the syllabus designer to propose syllabus that includes task and reading activities based on the students' interest in the order to gain the instructional objective well.

Table 4.6 The Students' interest in Learning Writing.

Writing Activity	**Number of Respondents**	**Frequency**	**Percentage**
Writing a short sentence		40	29.20%
Writing a paragraph		47	34.31%
Writing a conclusion/summary		20	14.60%
Writing a conversation/ dialogue		30	21.90%
	65	137	100%

Concerning the students' interest in learning writing, the table shows that most of the respondents are interested in writing a paragraph (34.31%). The other activity that the students are interested is writing a short sentence (29.20%). While, the percentage of writing a conclusion/ summary is 14.60% lower than writing a conversation/ dialogue (21.90%).

Table. 4.7 Kinds of Teaching Methods

Methods	**Number of Respondents**	**Frequency**	**Percentage**
Lecturing		24	18.18%
Discussion		50	37.88%
Presentation		43	32.58%
Self-study		15	11.36%
Modeling		20	13.15%
	65	152	100%

About the teaching methods of strategies used by the teachers in delivering the topics, most of respondents agree that discussion is the most enjoyable activity during the class. It means comprehending the text by doing questions and answers

activity lead them into improving and increasing their knowledge about the topic. They also can share their opinions enthusiastically because the topics are their interest and they have the schemata.

Table 4. 8 Teaching Assessment

Assessment	Number of Respondents	Frequency	Percentage
Multiple choice		**65**	**22.73%**
Essay test		7	2.45%
Assignment		30	10.49%
Presentation/ participation		65	22.73%
Matching		65	22.73%
Question and answer		65	22.73%
	65	286	100%

Concerning the assessment, most of the respondents show the highest percentage on the presentation test, multiple choice test, matching assignment, question and answer.

The Result of the Analyzing Interview with the English Lecturer

One English lecturer is available to dedicate her time for doing interview session. The interview covers the following points: 1) the importance of syllabus, 2) the importance of a lesson plan in the teaching and learning process, 3) the teaching techniques and the media used, 4) the problems of teaching English at Management, 5) materials availability, 6) the expected competencies of the students, and 7) the effectiveness of the distribution of semester for teaching English.

In response to the first question, the English lecturer stated that syllabus guided her to direct the teaching and learning process especially as they are teaching English for specific purposes which they ever imagined. The next question is directed to find out about the idea of having a lesson plan before teaching. She said that a lesson plan is important in teaching preparation but unfortunately she did not make a lesson plan before teaching. She faced problems in making it because the absence of English syllabus was not provided by the previous lecturer at Management Department of Borneo University. Making a lesson plan needs a very careful thought because it reflects the actual step-by-step of the teaching and learning process in a certain limited time. Concerning the techniques and media used in delivering the materials, the lecturer said that it depends on the objectives of the teaching and the materials. In dealing with the language form lecturing is more effective since most students were not accustomed to using the language in their daily life due to the limited knowledge of the language used. Fourth question is intended to find out the problems faced by the English language lecturer dealing with the students and the materials. Talking about students' problems, it seems that they get difficult in comprehending the text and organizing the ideas into spoken language, and they actually want to express their opinion but they no sufficient vocabulary to be used.

Finding the materials suitable for teaching English for Management students was one of the potential problems faced by

the English language lecturer. Sources or references discussing English for Management study were very limited, thus lecturer has to select the most appropriate and the relevant materials. Another crucial problems faced English language lecturer was lack of the content subject in generally.

The sixth question was asking the expectation of the lecturers to the students' competence in finishing English for Management Department. She expected from the students were able to produce sentences of their own with the given clues of their content subject. The students are also expected to have the ability to grasp and digest the test of their content subject to improve their academic achievement.

Responding to the last question on the effectiveness of the distribution of the semesters in the English teaching, she said that it is no problem as long as the students actively equip themselves by practicing English during the formal teaching. She suggested that English be given on a three semesters beginning from the first semester for General English, the second or third semester for English for Management content.

Conclusion

This research was specially intended to produce an English syllabus for Management students at second semester. The result of this research finally produces an English content-based syllabus of integrated language skills. This syllabus is crucial to be provided since there is no English syllabus available for Management students. The product of this research consists of course outline (involving course identity, course description, course objectives in general, evaluation and meeting schedule), topics and sub-topic selection, instructional objectives (general and specific instructional objectives), teaching and learning activities, learning experience, time allocation, evaluation and assessment system, and sources of the materials and media. An effective syllabus includes a balance of four language skills and variety of topics, task types, and input, with discussion, talk and data gathering as input.

The content-based was chosen to maintain the learners' motivation in learning English and to encourage lecturer to reach the goal in teaching through the achievement of the stated the general and specific objectives.

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Performance Analysis of Primary School Teachers; Study on Teachers Who Have Passed Certification Program

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ABSTRACT

Teacher has always been a strategic spotlight when talking about education, because teachers are always associated with any component in the system of education itself. The role of teachers in the school will determine the success of student participants. However, several studies showed "low-performance" at the time of playing the role of the teacher. This research to determine the impact of the provision of professional allowances on teacher performance. The results showed that competence in all aspects (pedagogical, personality, social, and professional) gives a value that varies between 2 and 4. Competence in direct contact with the learning process in the classroom are aspects of pedagogic and professional aspects show values lower. Values less on pedagogical aspect demonstrated by the ability to master learning theory and principles of learning to educate; curriculum development, and assessment and evaluation. While competence in the professional aspect is the mastery of the material structure of scientific concepts and thought patterns that support the subjects of teaching, and developing professionalism through reflective action.

Key words: Performance, competence, teachers, certification

Introduction

As the central figure in the educational process in schools, teachers are components or elements that determine the success of an education. Teacher has always been a strategic spotlight when talking about education, because teachers are always associated with any component in the system of education itself. Teachers play a major role in the development of education, particularly organized formally in school. Teachers also determine the success of learners, especially in relation to the learning process. In addition, teachers are the most influential component of the "creation of process and outcome quality education". Because of the important role of teachers in the education process so that a teacher is required to always improve his ability as a teacher dignified and professional.

Several studies have been conducted related to the performance of teachers, for example, recently Cochran-Smith (2014) listed four consecutively appearing research questions regarding teacher education aimed at discovering the secrets of good teaching: (1950 - 1960) what are the attributes of good teachers?; (1960 - 1980) what teaching processes lead to effective teaching?; (1980 - 1990) what should teachers know, be able to do?; (since 2001) is nature (teachers are born) versus nurture (teachers are educated) more important? In the first case the main research question is how born teachers can be recruited? In the second case it is how teacher candidates can learn to teach? Another list of research traditions for discovering effective teaching1 (with approximate periods) is provided by Good (1996): (1960s) the focus on teacher personality; (mid-1960s -

1970) the search for a teacher-proof curriculum; (1968 - 1990s) investigation of teaching in naturalistic settings; (1960 - 1990s) relating teacher behaviour to student learning; (1960s - 1990s) examination of how teachers utilized classroom time; (1970s - 1990s) centering on teacher cognition; (1980s - 1990s) focusing on student mediation of teaching; (1990s) studies on teaching for understanding.

The results from Smith and a good list above, argues that a common trend for the research of teacher education and teacher effectiveness is moving away from attempts to discover specific and simplistic indicators of good teaching to indicators embracing teacher professionalism in all its aspects (e.g. teacher learning as personal-professional growth or teaching for understanding). As Good (1996) points out, each research tradition has yielded relevant ideas for the evaluation of teaching and by relying on a paradigm of inclusion researchers can take advantage of all the positive aspects of former research.

Studies by Parry (1991) in the United States and Wragg et al. (2000) in the United Kingdom found that a teacher may demonstrate under-performance in a number of ways: (a) inability to control the class; (b) poor planning and preparation; (c) poor subject knowledge; (d) poor teaching; (e) low expectations of pupils; (f) poor relationships with pupils; (g) poor relationships with colleagues; (h) poor quality pupil learning and progress; (i) lack of commitment to the work; and, and (j) inability or unwillingness to respond to change. (In Jones, Jenkin, & Lord; 2006).

The description, showing the demands of teacher competence becomes very important in improving the quality of education. To that end, the government through the ministry of national education, has launched a teacher certification program. However, the certification program, which in essence is to improve the competence of teachers, it was not as expected. Teachers who have passed the certification does not show significant competence (Kompas, 13 November 2009). According Baedhowi, presented the study results, that the motivation of the teachers followed the general certification related financial aspects, namely get immediate professional allowance (Kompas, Nov 13, 2009). The same motivation is found by "Directorate PMPTK", Ministry of Education when conducting similar studies in West Sumatra, East Java, Central Java, South Sulawesi and Nusa Tenggara Barat in 2008. The results show, although their reasons vary, in general, their motivation is to follow certification financial. The main objective to achieve certification of the competence of teachers still seem to be addressed as a discourse.

Then on the competence of teachers, it can be seen reports initial acquisition competency test results (UKA) for teachers before the certification program and the Teacher Competency Test (UKG) after passing the certification program. Mohammad Nuh (in JPNN, 2012) says that the image of the national average value UKA is 42.25 and average (UKG) online at 45.82 on the value scale of 0-100. From the results of UKA and UKG above, the value of the national average lows are always owned by primary school teachers, ie 36.9 (UKA) and 42.05 (UKG). Currently, the number of elementary school teachers (SD) is the largest part of the total number of teachers nationwide, which is about 1.6 million (55%) of the

overall number of teachers in Indonesia (JPNN, 2012). Another thing that is "shocking" that the test result data of teacher competence (UKG) for teachers who have passed the certification and an allowance teacher certification held on line in stage I (July-August) period in 2012, was an elementary school teacher in Southeast Sulawesi was ranked number 25 out of 34 provinces with an average of 36.86 (Bambang Sulistio, 2012). It is still very far from the standard graduation is a minimum score of 70.

Review literature

Effective Teaching and Qualified Teachers

One theory references in this study was proposed by Looney (2011). This article points out the relevance of teacher evaluation for improving the quality of teaching: "… any system for teacher evaluation needs to be tied to a clear set of standards and competences … [as there is] … no single, widely accepted definition of teacher quality"; and provides a six-point list of the most effective teacher attributes as "… a reflection of the complexity of teaching and learning" research (p. 441). According to Looney (2011), the most effective teachers: (a) are intellectually able. Verbal skills are particularly important; (b) have good knowledge of the subject-area(s) and competences they are teaching, as well as a broad repertoire of teaching methods and strategies to meet diverse student needs; (c) develop positive relationships with their students and recognize the crucial role of motivation and emotions in learning; (d) have strong classroom management skills, including clarity in the presentation of ideas, well-structured lessons and appropriate pacing; (e) are skilled assessors.

They use assessment 'formatively' to monitor students and provide timely and specific feedback on what students need do to improve performance and meet learning goals; and (f) work collaboratively with their peers to develop a positive school climate, to improve overall school performance and engage in mutual support and professional learning (pp. 441-442).

However, the most frequent practice of defining good teaching in many countries is teacher competence requirements or standards (e.g. Bourgonje & Tromp, 2011; Roth, 1996). Three of them that are validated through research or the documentation of development procedures based on research or professional literature are introduced in the following section with a focus on their validation.

While according to SBL (the Association for the Professional Quality of Teachers), seven partial competences are sufficient to cover all essential aspects of teacher competence (Bourgonje & Tromp, 2011). These seven competences are defined as: (1) Interpersonal competence in creating a pleasant, safe and effective classroom environment; (2) Pedagogical competence to support children's personal development by helping them to become independent and responsible; (3) Subject knowledge and methodological competence that demonstrates substantial knowledge of their subject and appropriate teaching methods (including pedagogical content knowledge); (4) Organizational competence in organizing curricula that support student learning; (5) Competence to collaborate with colleagues and thus contribute to a well-functioning school organization; (6) Competence to collaborate with those in the school environment who also play a role in students' well-being and development (e.g.

students' parents or guardians, colleagues at educational and youth welfare institutions); (7) Competence to reflect and develop as professionals over the long term (Snoek, 2011).

Then the model of core standards (10 INTASC principles) for student teachers grew out of the five propositions about effective teaching adopted by the NBPTS (Arends, 2006). A recent revision of these standards was launched to develop an updated version. The beta version of these standards is publicly available and aims at student and as well as practicing teachers (Council of Chief State School Officers, 2013). All ten standards define expected teaching competences in terms of performances, essential knowledge, critical dispositions, and descriptions for progression.

However, the most interesting feature of these draft standards is the descriptions of progression for the listed standards that outline three levels of professionalism in teaching. The main categories of these standards are: (1) learner development; (2) learning differences; (c) learning environments; (d) content knowledge; (e) application of content; (f) assessment; (g) planning for instruction; (h) instructional strategies; (i) professional learning and ethical practice; and (j) leadership and collaboration (Council of Chief State School Officers, 2013: pp. 16-47).

In spite of the theoretical problems with ensuring the validity of strict when identify models and components of good teaching skills, more teachers usually follow a process of teacher competency requirements or national standards as the coordination framework for carrying out their duties and responsibilities in school, especially when teaching.

According Danim, (2002) to see if the teacher is said to be a professional or not, can be viewed from two perspectives. First, judging from the minimum education level of educational background for the level of school where he became a teacher. Second, teachers' mastery of teaching materials, manage the learning process, manage students, performing tasks guidance, and others. This perspective refers to the concept adopted in the Ministry of National Education, as an "instructional leader" teachers must have 10 competencies, namely: (1) Develop a personality, (2) Mastering the foundation of education, (3) Master of instructional materials, (4) Develop the teaching program , (5) Carry out the teaching program, (6) Assessing the results and the learning process, (7) Conducting guidance. (8) Carrying out the administration of the school. (9) Cooperation with colleagues and the community. (10) Conducting basic research for teaching purposes.

While in Act No. 14 of 2005 on Teachers and Lecturers "clause 10" and Government Regulation No. 19, 2005 on National Education Standards, "clause 28", mentioned that qualified teachers must have four competencies, namely pedagogical, professional competence, personal competence and social competence. Fourth competence is described below:

1. Ability Pedagogic. In the Act No. 14, 2005 on Teachers and Lecturers stated pedagogical competence is the "ability to manage the learning of learners". Ministry of Education (2004) calls this competence with "learning management competence. These competencies can be seen from the ability to plan a program of teaching and learning, the ability to implement

or manage the interaction of teaching and learning, and the ability to make an assessment.

2. Ability Professional. According to Act No. 14, 2005 on Teachers and Lecturers, professional competence is the "ability of mastering the subject matter is broad and deep". Ministry of Education (2004: 9) argues professional competence include: (1) professional development, (2) understanding of insight, and (3) mastery of academic study. Professional development includes (1) follow the development of information science and technology that supports the profession through various scientific activities, (2) transfer the textbook / scientific work, (3) develop a variety of learning models, (4) write a paper, (5) writing / composing textbook lesson , (6) write textbooks, (7) writing module, (8) to write scientific papers, (9) carry out scientific research (action research), (10) found the appropriate technology, (11) making props / media, (12) creates a work of art, (13) following the accredited training, (14) follows the educational qualifications, and (15) follows the curriculum development activities. Understanding insights include (1) understand the vision and mission, (2) understanding the relation between education and teaching, (3) understand the concept of primary and secondary education, (4) understand the functioning of the school, (5) identify common problems of education in terms of process and outcomes of learning, (6) establish a system that shows the linkage of education and out of school. Mastery of academic study materials include (1) understanding the structure of knowledge, (2) master the material substance, (3) control of the substance of power in accordance with the type of services needed by the student.
3. Social Skills. Effective teachers are teachers who are able to bring their students to successfully achieve the objectives of teaching. Teaching the class is a manifestation of interaction in the communication process. Accordance with Act on Teachers and Lecturers, social competence is "a teacher's ability to communicate and interact effectively and efficiently with students, fellow teachers, parents / guardians of students and the surrounding community".
4. Personal Capability. Teachers as educators whose primary task of teaching, have personality characteristics that influence the success of human resource development. Steady personality of the figure of a teacher will give a good example to students and the community, so the teacher will appear as a highly inappropriate "digugu" (adhered to the advice / words / commands) and "imitated" (in the example of the attitude and behavior). The teacher's personality is an important factor for the success of students learning. Accordance with Act on Teachers and Lecturers, personal competence is the "ability of a stable personality, noble, wise and dignified as well as being exemplary of learners".

Teacher Certification

Act No. 14, 2005 on Teachers and Lecturers, clause 16, states that a teacher who has a teaching certificate, are entitled

to incentives in the form of the professional allowance. Great incentive allowance promised by Act No. 14, 2005; is equal to one basic salary for each month. Improving the welfare of teachers in relation to certification must be understood in order to improve the quality of national education, both in terms of process (service) and results (outcomes) education. Samani et al, (2006), states that the need to realize that the teacher is a subsystem of national education. With the certification, expected competence of teachers as agents of learning will be increased in accordance with established standards. With the competency of teachers who meet the minimum standards and adequate welfare expected performance of teachers manage the learning process can be increased. Increasing the quality of learning that is expected to lead to the end on the achievement of student learning outcomes.

Thus, implementation of teacher certification is one form of implementation of Act No. 14, 2005 on Teachers and Lecturers. The law states that teachers are professional educators with the primary task of educating, teaching, guiding, directing, train, assess, and evaluate students on early childhood education, formal education, primary education and secondary education. Professional teachers must have a minimum academic qualification of scholars (S-1) or Diploma (D-IV), master competencies (pedagogical, professional, social and personality), has a teaching certificate, physically and mentally healthy, and have the ability to realize the goal of education national.

Flow implementation Occupation Teacher Certification In accordance with the Regulation of the Minister of Education and Culture, No. 5, 2012 on Certification for Teachers presented in Figure below

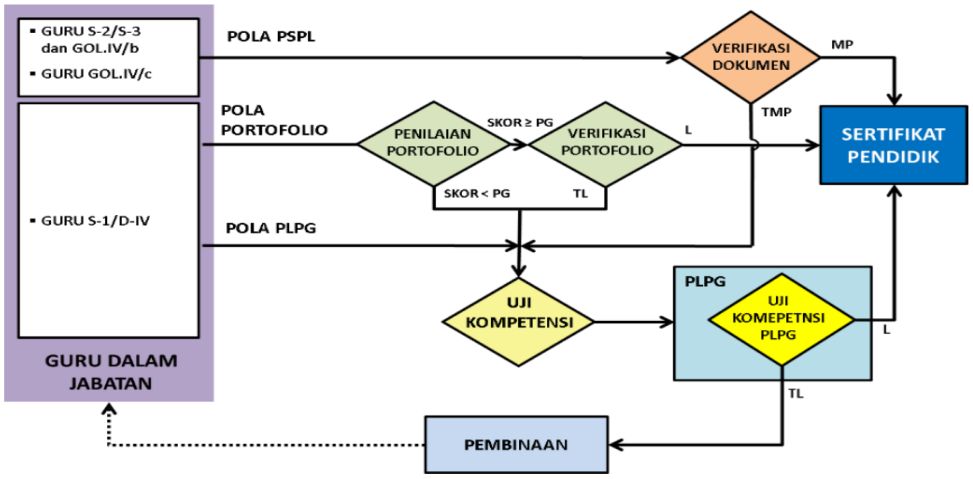

Figure 1. Flow Teachers Certification

Aim and Research Questions

This study, in principle, to determine the impact of the provision of professional allowances on teacher performance. Do the teachers just have a performance boost for a professional certificate and, after that performance back mediocre even declined? To that end, the formulation of the problem in this research is how is the

performance index is a primary school teacher after the teacher passed certification and obtain professional allowance of teachers, the pedagogical, Personality, Social and Professional?

Methods

Participants

Taking into consideration the geographical aspects of the area and the spread of primary schools in the city of Kendari, the selection of the sample using the technique of purposive sampling. Based on this technique, then selected six districts out of 12 districts in the city of Kendari, i.e., Baruga, Poasia, Abeli, Kendari Barat, Kendari and Mandonga. In addition to this, the number of teachers who have passed a teacher certification program, is also a consideration research locations. In the same way (purposive method), in each district is determined primary schools located in the district area is selected as sample. The elementary school selected from 1 to 3 teachers as respondents. The number of respondents surveyed as many as 80 teachers from all teachers who have passed the certification program who served in primary schools, and is located in the region of the six districts.

Design

This is a descriptive exploratory study that is trying to depict or describe a variety of indicators that are found in this study. The indicator is compiled based on the context of the performance of teachers after graduate certification program. Design of this research survey.

Instruments

Research Instruments organized by the main task of a teacher is educating, teaching, guiding, directing, train, assess, and evaluate students. In addition to its main task, the teacher is also possible to have other tasks that are relevant to a school function. Therefore, the instrument teacher performance related to the implementation of the learning process for teachers of classes, activities include planning and implementing the learning, evaluate and access, analyze the results of the assessment, and implement follow-up assessment in applying the 4 (four) domains of competence that must be possessed by teachers according to the National Education Minister Regulation No. 16, 2007 on Academic Qualification Standards and teacher Competency. The learning management requires teachers to master some 24 competencies grouped into pedagogical, personality, social, and professional. To facilitate the assessment of teacher performance, 24 (twenty four) competencies are summarized into 14 (fourteen) competence as published by the National Education Standards Agency (BSNP).

Procedure

Based on the number of teachers were selected in this study, then performed a self-assessment process on the teachers using a questionnaire that contains performance indicators that teachers have been compiled in this study. Provision of self-assessment to consider that aspect of performance information more understandable by the person concerned. After the self-assessment is carried out, the process of observation of classroom teaching as (a) the evaluation process of self-assessment that has been filled by a teacher, (b) the process of directly observing the performance at the level of learning as a fundamental duty of a

teacher. Mechanism study was conducted as follows:

1. Conduct self-assessment performed by teachers on the characteristics of the condition, program development and performance that has been done
2. Conduct a review process assessment through a planned observation, measurable and sustained by the researcher
3. Conduct a process of triangulation of the results assessment and observations on some of the existing data source
4. Conduct an analysis of all data collected

Data analysis

Giving a score of 0, 1, or 2 for each indicator each competency. Scoring is done by comparing the summary records observations and monitoring in each competency evaluation sheet with performance indicators of each competency. Rules scoring for each indicator are:

- Score 0 indicates indicator is not carried out, or do not show proof,
- Score 1 states indicator partially implemented, or there is evidence but not complete
- Score 2 states the indicators are fully implemented, or there is evidence of a complete

Based on the results of conversion "teacher performance value" into a scale of values according to Permeneg PAN and RB No. 16, 2010 on the functional positions of teachers and credit figures. These results are grouped into 5 categories (91-100) called very good, (76-90) called a good, (61-75) is called enough, (51-60) called a medium, and (≤ 50) called less

Result

Values of competence which have been obtained in this study, is converted into performance grades of primary school teachers. The conversion value of each competency is described in the following table

Table 1. Converting the value of competence to predicate performance

No.	Social competence	Scores (%)	conversion value
1	Be inclusive, to act objectively, and not discriminatory	89,16	4
2	Communication with fellow teachers, staff, parents of students, and the community.	48,75	2
3	Total	137,91	6
	Conversion to the value of teacher performance		75
	Predicate		Enough

No.	Professional competence	Scores (%)	conversion value
1	Mastery of materials, structural concepts and "the mindset of science" in favor of teaching subjects.	11,04	
2	Developing professionalism through reflective action	23,95	1
3	Total	34,99	2
	Conversion to the value of teacher performance		25
	Predicate		Less

Discussion

Pedagogic competence

In the pedagogic aspects, illustrates some of the competencies that have not been qualified in a learning process, namely the master competencies learning theory and principles of educational learning, curriculum development competencies; and competency assessment and evaluation. The three competencies, in real terms have not shown good results, particularly on the indicators:

a) Using a variety of techniques to motivate the willingness of learners
b) Selecting learning materials in terms of: (1) correspond to the learning objectives, (2) accurate and up-to-date, (3) according to age and ability level of learners, (4) can be carried out in the classroom, and (5) according to the context of "daily lives of days "of learners
c) Analyzing the results of learning based on any form of assessment of each learner to determine the level of progress of each
d) Design and implement learning activities that encourage students to study according to skills and learning patterns respectively
e) Design and implement learning activities to bring the power of creativity and critical thinking skills of learners.
f) To identify correctly about the talents, interests, potential, and learning difficulties each learner.
g) Using teaching aids, and / or audio-visual (including ICT) to increase the motivation of learners in achieving the learning objectives.
h) Assessing the various techniques and types of assessment, in addition to formal assessment carried out of the school, and announce the results and implications for the students, about the level of understanding of the learning materials that have been and will be studied.
i) Analyzing the results of the assessment to identify topics / competencies that are difficult, so the known strengths and weaknesses of each learner for both remedial and enrichment

If explored further, the indicators mentioned above is associated with the ability of teachers to prepare for a learning process. This inability is associated with conditions experienced by teachers. One finding of this study is the habit of teachers to plan learning programs to "imitate" models of the existing plan. They do not get used to finding and setting up new learning activities. This habit is supported by the many "examples of lesson plans on a variety of sources" that resulted in the teacher is difficult to eliminate this habit. The practice of "copy and paste" seemed to be things that are "normal". The results showed that often (assuming the researchers that it is a habit) in teaching teachers do not carry media or a learning tool in the classroom. No need to debate, but in learning in primary schools, the media or teaching aids will be able to lead learners to mastery of a more in-depth than learning without tools (media / teaching aids). The principals admit it, even teaching aids for some topics are already available in the school, but the teachers did not use these teaching aids.

This condition has some consequences for the success of teachers bring learning into the world of real children (contextual). Real understanding of bringing children into the world they will pose a very different atmosphere because of their proximity to feel to feel important events and important things in their lives. The description above, argue that elementary school teachers, are in fact not been set up or create your own learning devices (RPP), but the process mimics the

learning device (RPP) that already exist. Consequently, the device is not in accordance with the characteristics of the child and the classroom where the teacher teaches. Moreover, teachers lack the capability of beginning students in a learning process so that the process of learning activities do not lead to the development of student potential, for example the division of the working group, active in student activities, and so forth. Another important thing is not to evaluate teachers to be able to determine the extent to which students are able to absorb the material, values and norms so that students are not only clever but also have character.

Personal competence

Performance elementary school teachers on aspects of personality results by category "very good" based on the observation of researchers for the study. Teacher's ability to (a) act in accordance with religious norms, legal, social and national culture of Indonesia, (b) shows a mature person and exemplary work ethic, high responsibility, and (c) a sense of pride in being the master; showed good results. But the results of the study researchers, there are several indicators that still need to be improved, namely: (a) want to share his knowledge with colleagues, including inviting them to observe their teaching and provide feedback; (b) utilize the spare time besides teaching for productive activities related to its duties, and (c) to contribute to the development of the school and have a positive impact on the achievement of the school's reputation.

Social competence

Teacher performance on social aspects that are in the category of "enough". Competence showing poor results is communication with fellow teachers, staff, parents of students, and the community. Build communication still looks difficult because it depends on the character of the individual teacher.

Based on observations, some indicators were observed, for example, (a) present information about the progress, difficulties and potential learners to his parents, both in formal meetings and informal between teachers and parents, peers, and can show proof, (b) Participate actively participate in learning activities outside organized by the school and the community and can provide proof of participation, and (c) pay attention to the school as part of the community, communicate with the surrounding communities, as well as play a part in social activities in the community; still difficult to get valid data. The indicator is difficult because in addition to the limited personnel involved in community activities, other obstacles are financing that is sometimes borne by the teacher. However, whatever the reason, the condition of communication and relationships must be kept within the limits specified and within the framework of building a quality education.

Professional competence

Performance certified elementary school teacher in the town of Kendari, based on the results of the data collection showed a "less". This condition illustrates several weaknesses or deficiencies of a learning process in the classroom. Almost all indicators of competence that exists in this aspect does not provide satisfactory results. Some things that are found in this study, among other things:

a) Often the teacher does not carry media teaching or learning tool in the classroom, while teaching in elementary school can hardly be said that the "teaching aids or media" are extremely vital for a student in providing a level of

understanding and mastery of the material.

b) Teachers rarely use teaching methods to attract or delightful student. Real condition that there is a lecture-based and / or expository. It does not mean that both methods are lacking a tub, but the teacher did not show variations of existing models of learning, for example, contextual teaching learning, quantum teaching, inquiry, project based learning; appropriate to the context of learning materials

c) The teacher is not able to provide an explanation of the basis of the theory of education adopted in conducting a learning process. This condition is the result of less active teachers read books and other references relating to his profession. The findings showed that teachers who have received the allowance is not actively engaged in efforts to improve academic skills with a variety of reasons. A small example is presented by researchers is the percentage of teachers who took the initiative to buy a "book" for the development of her skills, while receiving benefits of certification are far short of expectations, even though the book is an important factor in developing the ability of teachers, especially for use on a greater importance for development efforts self

d) Teachers rarely / never do research and write an article or other writings for receiving an allowance certification. Construction allowance gives great hope for teachers to further improve the quality of powerlessness in the process themselves, particularly in the form of professional sustainable development (PKB). There is expectation that the teacher should be more to observe, analyze and observe the events surrounding it, as well as the diligent search for the solution of every problem that exists, then learn to put it in a yield scientific papers, but this should be a "difficult and never "implemented by the teacher.

These findings became quite apprehensive on the competency of primary school teachers. The teacher as a figure, a character who plays a major role in a classroom, have an important role in determining the quality of education of the nation as an appeal Anies Baswedan (minister of education and culture), states that face the future of this nation is in the classrooms. Whatever the outcome of this study, with all the problems and obstacles that are often encountered by a teacher when he had to teach in front of his students, then the teachers are only human figure, which is not free of weaknesses and errors. For that, it is one of the actualization of the task of teachers as professionals is the issuance of Law No. 20 of 2003 on National Education System, Law No. 14 Year 2005 on Teachers and Lecturers and Government Regulation No. 19 Year 2005 on National Education Standards. Legislation and government regulation is expected to facilitate the teachers to always develop the profession continuously

Conclusion

Competence in all aspects (pedagogical, personality, social, and professional) gives a value that varies between 2 and 4. Competence in direct contact with the learning process in the classroom are aspects of pedagogic and professional aspects show values lower. Values less on pedagogical aspect demonstrated by the ability to master learning theory and principles of learning to educate;

curriculum development, and assessment and evaluation. While competence in the professional aspect is the mastery of the material structure of scientific concepts and thought patterns that support the subjects of teaching, and developing professionalism through reflective action.

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The Role of Self-Concept on Improving the Performance of Guidance and Counseling Teacher at Senior High School (SMA) Level

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ABSTRACT

This research investigates the role of self-concept on improving the performance of guidance and counseling teacher at Senior High School level. It was a qualitative research with descriptive qualitative design or library research design, where the researcher read some sources related to the title in order to write this research. In order to achieve the education goal, the role of the guidance and the counseling teachers is assisting the students to meet their interest because it helps them to develop themselves. To realized the aim of self-development the expertise teacher in the field of guidance and counseling are needed. Through the expertise they have, the teacher are expected to be able to help the learners to understand the talents and interested. Learners are placed based on their ability and interest that leads them to achieve their goal, therefore the guidance and the counseling teachers must have a high self-concept, and the right education background qualification which is guidance and counseling that helps the learner adapt themselves to the changes of environment and achieving the goals as optimal as possible.

Keywords: self-concept, performance, guidance and counseling.

Introduction

Providing education as mandated in Law No. 20 of 2003 on National Education System is expected to realize the process of quality development of students as the future generation, which is believed to be a determinant factor for the growth of the Indonesian country throughout the ages. Of all the elements of educational resources, human resources, one of which is an element that teachers make a significant contribution in realizing the process of developing the potential quality of the learner, so no doubt that teacher who works in high school is to realize the goal of education. According to the Indonesian Government Regulation No. 74 Year 2008 about "Teachers" Chapter II, Competence and certification Article 3, paragraph 2, which states: "The competence of teachers is includes pedagogical competence, personal competence, social competence and professional competencies acquired through professional education" (Mulya Karya 2009:5).

This is in accordance with the Ministry of National Vision 2025, the Indonesian people produce intelligent and competitive. What is meant by intelligent beings Indonesia is an intelligent man, a comprehensive, i.e. spiritual intelligent, emotionally intelligent, socially intelligent, intellectually smart, and intelligent kinesthetic (Renstra Kemdiknas 2010-2014:25).

Curriculum 2013 makes the selection of specialization based on grades in SMP / MTs and the National Examination of

SMP / MTs or recommendation from a guidance and counseling teacher in SMP / MTs or the results of the placement test (placement test) when signing up for SMA / SMK. It is to be carried out in their task by the guidance and counseling teacher, by placing learners in accordance with their interests, such learners are expected to be further increased his desire to learn and achieve a desired goal.

In the Kurikulum Tingkat Satuan Pendidikan, the focus of guidance and counseling services are for self-development. Self-development is an educational activity outside subjects as an integral part of the curriculum of the school/madrasah. Development activities in an effort of formation of character and personality of the students who conducted through counseling services with regard to issues of personal and social life, learning, and career development, as well as extra-curricular activities. For vocational education, self-development activities, especially counseling services geared to the development of creativity and career to special education units, counseling services emphasize improving life skills according to the specific needs of learners (Depdiknas, KTSP, 2006).

Related to the sizeable role that teachers of guidance and counseling must be professional. Specialist who masters the scientific knowledge and skills in the field of guidance and counseling in accordance with the guidance and counseling teacher qualifications in the Minister of National Education of the Republic of Indonesia Number. 27 Year 2008 about Standard Academic Qualifications and Competencies Teacher of Guidance and Counseling in the units of education whether it is formal education or non-formal is: "Bachelor of education (S-1) in the field of Guidance and Counseling and educated in guidance and counseling teacher" (Depdiknas 2008: 7). The guidance and counseling teacher as a professional person would be able to bring students to the demands of modern life. Therefore, as a professional guidance and counseling teacher should be aware that the teaching profession, including teachers, guidance and counseling it is a public service, where he was a guidance and counseling teacher to master science field of guidance and counseling to be provided to students in the form of services Guidance and counseling. But the fact in the field, it is still found that the guidance and counseling teacher works as a teacher of guidance and counseling which teachers which derived from an art teacher, a teacher of German, and former school principal who is officially end but is not yet time to retire works as a teacher of guidance and counseling, of course it would be a problem for him to perform his duties as a teacher of guidance and counseling.

Besides, the guidance and counseling teacher should have the creativity and high initiative to develop itself to be able to carry out their duties as educators in the field of guidance and counseling that are relevant to the demands of the times, science and technology especially in the field of education and learning in the field of guidance and counseling.

Then, the guidance and counseling teacher should also voluntarily perform their duties in accordance with the code of profession ethics as a guidance and counseling teacher namely performance provision of counseling services to all students and carry out individual counseling and group counseling service in accordance with the needs of learners in

order to achieve the goal of education, in this case the achievement of the curriculum targets.

On the one hand how high expectations to be realized by the teachers in order to achieve these objectives, but when viewed through a competency test teacher who is on line truly alarming, and many more issues that felt by learners who demonstrate the performance of the guidance and counseling teacher seemed to be less than satisfactory, among others:

First, problems and complaints about services provided guidance and counseling teacher schools are still many leveled, though its existence has positively contributed to the achievement of personal development of students through education in schools.

Second, globalization is sweeping the world today life has spawned a number of opportunities and challenges. Education and guidance also got a challenge to be able to carry out its duties and functions that through his ministry, students can become qualified human resources, able to face and overcome the current development of life with the progress of science and technology is increasingly complex. Thus the demand implies the need for educators, including teacher professional guidance and counseling so that they can organize educational activities professionally as well.

Third, it can be observed that it has made various efforts to develop the competence of the guidance and counseling teacher through various activities such as in-service upgrading courses, seminars, workshops, and the like.

Teacher performance Guidance and Counseling in performing their duties, namely an increase in his ability to educate, teach, guide and train the students toward the goal to be achieved, this can be achieved if the guidance and counseling teacher professionals so that they can carry out their duties with full responsibility, dedication and skill with skill as well.

Indeed, the performance of the guidance and counseling teacher can be increased toward that are more excellent in helping inseparable from the role of leadership style principals, education supervisors, school culture and self-concept, but in this discussion the author only explain conceptually about the role of self-concept in improving teacher performance guidance and counseling.

Research Method

The research method used in this research is qualitative research with descriptive qualitative design or library research design. Where in conducting the research, the researcher collecting the data of the research by reading the books, researches, journals, articles which written or done by others. In the other hand, this research only use theoretical data taken from the library.

Discussion

Performance

Senior High School (SMA) is a secondary education providers are required to produce graduates who excel in order to pass the entrance at State Universities. These goals can be achieved if it is supported by teachers who are highly qualified and competent. Teacher is one of the essential components of a national education system. Roles, duties, and responsibilities of teachers are very significant in realizing the function and purpose of national education. The purpose of National Education based on

the Law of National Education System Chapter II verse 2-3 are:

National Education based on Pancasila and the Constitution of the Republic of Indonesia 1945 serves to develop the ability and character development and civilization of the nation's dignity in the context of the intellectual life of the nation, aiming for the development potential of the learners to become a man of faith and piety to God Almighty, noble, healthy, knowledgeable, skilled, creative, independent, and become citizens of a democratic and accountable (UU Sisdiknas, Fokus Media, 2010:5).

To realize the function and purpose of education, competent and qualified teachers are needed a in order to perform their roles, duties, responsibilities as well as with a very strategic position in helping learners, certainly needed a teacher who professionally or in other words, has a high performance.

In Kamus Besar Bahasa Indonesia (KBBI), Ministry of National Education Language Centre (2008: 700), "is something that is achievable performance or the performance shown or workability can be said that the performance is the capability of a person can be shown to workers associated with the job. The terms of performance or in a foreign language better known by the performance or terms to refer to the ability shown by someone working in their duties or in other words performance capabilities.

Laura and Stephen (2005: 245), suggests that:

Performance is getting the organizational processes right, but within the organizational framework there are the teams, groups and individuals who do the work. Also within that framework we have to understand what it is that motivates people to perform and deploy leadership skills that match those motivations.

Performance is a process within the organization to get the right position, within the framework of organizations and teams, groups and individuals who do the work. Also within the framework that we have to understand what motivates people to commit and deploy the ideal leadership skills through motivation.

Basically, the performance is the behavior and capabilities which are shown by someone on its job in his working place. Given the performance is something that is essential to the success of education in schools; it is an effective performance for every teacher needs to be created so that the purpose of education in the school as an organization can be achieved with optimal. Thus of the three terms in the above it can be stated that the performance of teachers is the teacher's performance reflects the performance as an expression of knowledge, attitudes, and skills they have.

Pedagogical competence, personal competence, social competence, professional competence is a competence that must be possessed by the teacher. So the performance of teachers is the application of the teachers' competency. Gibson (2009: 92), states that "individual factors influence behavior. The factors are ability and skill, family background, personality, perception, attitude, values, attributes, learning capacity, age, race, sex, and experience ". Individual factors are very complex, which factors affect the behavior of the individual. Furthermore it is said "employees' behavior leads to outcomes." (Gibson, 2009: 93). Teacher attitudes affect the work or performance. Hewitt in Sofo (1999: 271), otherwise the function of producing results. If people know what they should do to gain feedback, how they succeeded or not, and received an award for doing something

well they should. School institutions will be more likely to get the output and the results they want, ie learners who are able to compete in SNMPTN and the working field.

Deming in Dessler (2006: 322) states that basically a teacher's performance is a training function, communications, tools, and supervision. It means that Deming emphasis on performance management in goal-setting, assessment, and development of an integrated, due to increased utilization of performance management as a result of the growing popularity of the concept of total quality management. That means when the guidance and counseling teacher of some training on how to improve its performance and improve communication, especially interpersonal communication will further enhance its role in achieving the guidance and counseling program that has been established in conjunction with a team of the guidance and counseling teacher in schools and also in MGBK.

According Danim (2008: 70) states that the performance is competency in action. This means that the performance is seen as an integral part of competence. Competence is a set of knowledge, skills, and values reflected in the basic habits of thought and action. Competence can also be defined as the specification of the knowledge, skills, and attitudes of a person as well as its application in the work, Taxonomy competency standard includes standards for content (content standards), the standard process (process standards) and appearance standards (performance standards). Appearance standards deal with performance criteria.

Harianja (2002: 195) suggests that the performance is the performance which is generated by the employee or the real behavior that is displayed in accordance with its role in the organization. It means that the teachers' all performance is the performance of the resulting teacher or real behavior displayed by teachers in accordance with his duties at the school.

Juntika (2008: 37) states that in carrying out its duties as a guidance and counseling teacher should be initiated from the personal qualities of the teacher. Juntika cites the opinion of Cavanagh (1987 which argues that: "Personal qualities guidance and counseling teacher or counselor marked by several characteristics as follows: (a). self-understanding, (b). competent, (c). have a good psychological health, (d). trustworthy, (e). honest, (f). Strong, (g) warm, (h) responsive to, (i). patient, (j). sensitivity, (k). have a holistic awareness.

That opinion was interpreted that guidance and counseling teachers will be able to demonstrate high performance for own capital high personal qualities, namely: (a) self-understanding: teachers have an accurate perception of him, it allows him to get to know others with the right; (b) competent: the counselor's own physical, intellectual, emotional, social and moral as personal handy; (c) good health psychological: able to obtain the satisfaction of the needs of safety, love, strength and sex, can overcome the problems encountered, comprehend the advantages and disadvantages that exist in themselves and always wanted to create a better life; (d) trustworthiness: the counselor is not a threat or a cause of anxiety for clients; (e) honest: transparent, open, authentic and original; (f) strength have an attitude of self-identity is a clear, flexible, able to make a reasonable time in the counseling process; (g) warm: the attitude of friendly, attentive, and give

love; (h) responsive: have dynamic attitude not passive attitude, able to communicate her attention to clients' needs, (i) forbearance: help clients as how it is; (j) sensitivity: the counselor is aware of the psychological dynamics that are hidden or irritable properties both on the client's self and to himself his own counselor; and (h) holistic awareness: that a counselor understands the client as a whole and does not approach it flakily.

Teacher of guidance and counseling in this case as a person who has expertise in the field of guidance should be able to demonstrate the performance that can help the student to understand the talents and interests so that they are placed in the right place which in it helps students achieve its goals. Therefore, guidance and counseling teacher should really have qualified so as to achieve the purpose of the school with the outcome as possible.

In *Permendiknas* 27 of 2009 about Standards of Academic Qualifications and the counselor Competencies stated that there are four competencies that should be mastered by the guidance and counseling teachers/counselors, such as: pedagogical competence, personal competence, social competence, and professional competence. Fourth formulation of this competence is the basis for the Teacher Performance Assessment Counseling / Counselor.

If we want the effective performance of the teacher, it is proper that the current system should be organized immediately, so that learners in the school could develop some potential of intrapersonal life such as: having a positive self-concept, capable of regulating themselves, confident, and independent. Also, students can develop interpersonal realm of life so that they have a social conscience, the ability to establish and maintain relationships, and take responsible decisions. In the realm of academic life, it was expected to evolve so that students have a high motivation in learning, and be able to perform in daily life. Similarly, in the realm of career life, students are able to recognize and understand the profession and these jobs according to their talents and interests they have in order he was able to be productive, creative, and innovative, and have the faith and piety in jobs and professions that they do later.

The performance assessment requires an objective assessment, which measures the actual performance, it means that the implementation of performance assessment should evaluate the work performance. For that, performance appraisal system should: (1) standardized; (2) trusted size, and (3) easy to use. The method in question is how and equipment that are used as forms and implementation. While the evaluation of assessment is the provision of feedback to teachers on aspects of performance that must be changed and maintained as well as the various actions to be taken, both by the organization and teachers in order to improve in the future. Nawawi (2008: 236-237), suggests that: (1) the assessment of the work is the systematic description of the relevance of the tasks given to its implementation by a worker, (2) an assessment of the work is an attempt to identify, measure (assess) and manage work performed by workers (human natural resources) in the environment of an organization, (3) performance assessment is an activity to identify the implementation of work by assessing its aspects, which focused on the work that affect the success of the organization, (4) the assessment of the performance of the act of measuring (measurement) as an attempt to establish a decision on the success or failure in carrying out the work by a worker.

From the definition of performance appraisal can be concluded that the performance assessment is necessary and must be done in a professional manner, in which the performance assessment should be designed with due regard to the technical aspects of the job and also the social aspect. The technical aspect is touched assessment knowledge and expertise of the work, while the social aspect with regard to attitudes and labor relations in the achievement of organizational goals.

From the description can be identified some important things, namely: (1) The performance assessment can only be made on the activities in the implementation of the visible or observable when teachers perform their duties, (2) performance assessment related to grace a limited time, (3) the performance evaluation results are useful only when able to provide an overview of the advantages and disadvantages of workers in performing their duties, the advantages and disadvantages that can only be known if the results of the assessment of performance when compared with the performance standards, (4) the assessment of performance is part of the overall management activities , (5) performance assessment related to the implementation of complex work, therefore it needs to be done in a professional manner so that results can be carried out as a feedback for many other fields.

Self-Concept

In formal educational institutions as well as high school, the teacher as a human resources strategic position in the achievement of its objectives. Someone should be able to do his job to the optimum. It is necessary for an objective assessment of himself, including the potential that can be developed. Because of these efforts will ultimately determine the level of maturity, both in the physical, psychological and sociological. Although it often happens that the self-assessment is subjective and tend to highlight only the positive traits about themselves. Someone who has a psychic maturity will know too negative traits. Such knowledge will provide an opportunity for leaders to provide input for improvement. In the assessment of teacher performance, one component of the measurement is the teacher's perception of herself. Teachers described himself associated with the task being performed. In this case the role of positive self-concept is crucial.

The introduction of the characteristics of positive and negative on who we are will encourage increased ability to work, and so he is able to evaluate or judge him, by developing positive traits and reduce or even eliminate the negative traits. The introduction of self-assessment in the terminology of psychology called self-concept (self-concept). Therefore, it is necessary to study the problem of self-concept of teachers and how big influence on performance.

Furthermore, the success of the guidance and counseling teachers in helping students who have problems can be influenced by the self-concept of the guidance and counseling teacher. Mohammad Surya (2013: 87), which argued that: the self-concept is personality patterns that became the foundation for the realization of life in the neighborhood, it implies that the appearance of personality will be determined by the quality of the self-concept. The self-concept that exist within somebody, namely (1). Basic self-concept, (2). The

self-concept-transition, (3). The concept of social self, (4). The concept of ideal self.

The above opinion can be interpreted that: (1). the basic self-concept is one's perception of reality itself concerning the appearance, skills, roles and status in life, values, beliefs, and aspirations. (1) The self-concept-transition is a person's concept of himself temporary before being replaced by another self-concept. A shift in the individual self as always do interactions made by the individual (3) the concept of social self is one's perception of themselves based on beliefs about other people's views against him. Social self-concept is often referred to as "mirror image" of conviction about him made in a way to reflect the views of others towards him. (4) The concept of the ideal self is one's perception of itself as expected is ideal.

Tri Dayakisni and Hudaniah (2009: 61), citing an opinion on the self-concept is the belief that an individual of attributes (traits) which has (Brehm and Kassin, 1993) or can be understood as knowledge and belief held by an individual of the characteristics or personal characteristics (Worchel, et al, 2000). Hurton Charles Cooley (1902) called this concept the "looking glass self" We imagined what others think of us and what we think they think about us affect our self-evaluation. George Herbert Mead (1934) uses the same idea, that we are paying attention to the opinion / opinions about us, especially from people who are important in our lives (significant others).

The self-concept has an important role in determining individual behavior. Or assess an individual perceives himself to be apparent from all his behavior, in other words, a person's behavior will conform to the way people perceive and assess themselves. If the individual sees himself as a person who has enough capacity to carry out the task, then the individual will demonstrate successful practices in carrying out their duties. Conversely, if the individual sees himself as a person who lacks capacity to implement the task, then the individual will demonstrate incompetence in his behavior. Thus the self-concept which should be available by the guidance and counseling teacher "When teachers bK the self-important, capable in performing the task, then it will behave crucial and capable, otherwise if the teacher BK The squeeze itself less important, and the less able it will behave hesitate in carrying out their duties".

According Colquitt (2009: 292) states that, "personality Refers to the structures and propensities inside a person that explain his or her characteristic pattern of thought, emotion, and behavior". Personality means the structure and habits of the person who explains the nature on thoughts, feelings, and behavior. Personality is defined as a habit or a trend on the responses given to the environment, such as responsible, critical, neat, or have a good performance. Furthermore it is said there are five dimensions of personality (The big five taxonomy). Five personality dimensions, namely: (1) carefully (conscientiousness), (2) Friendly (agreeableness), (3) feeling (neuroticism), (4) open (openness) and (5) extraversion. Nature was influenced by genes, experience and environment. One important factor is the cultural environment that affect an individual. So we can say that someone in their work is influenced by genes, experience and environment.

According Mulyana (2001: 7), stated that the self-concept is "our view of who we are, and that can only be obtained through other people's information given

to us". That is the self-concept is one's view of himself through the information other people are saying to them through verbal and non-verbal behavior. The self-concept of the most self-affected families and people close that exist around. Someone has tried to behave as expected by others and never totally fulfill the expectations of others against him. But when interacting with others, hope, impression and image of others about a person greatly affects the self-concept.

According to James in Sobur (2003: 499) says that the self (self) is the composition of the thoughts and feelings into one's awareness of the existence of his individuality, his observations about what is hers, its understanding that he was, and the feeling of its properties, quality, and all his possessions. This means that a person is the sum totality of what could be called his own.

According Puspasari (2007: 1), stated that the understanding of the self-concept is the result of how we make the process of knowing who we are. The introduction of self-assessment starts from an assessment of the physical and then evolved to the introduction of non-physical self.

According Djaali (2009: 129-130), stated that the self-concept is one's view of himself regarding what he saw and felt about his behavior, the content of his thoughts and feelings, and how these affect the behavior of others. That is the self-concept in question is one's view of himself at the moment is not the view of him is ideal. The self-concept evolved from the experience of someone about various things about him since he was small, especially with regard to treat others against him. The self-concept originally derived from feeling valued or not valued. Feelings formed the basis of the views or assessment of a person about himself. Along with self-esteem McKay (2000: 1), states that, "self-esteem is essential for psychological survival. It is an emotional non sine cave without some measure of self-worth, life can be enormously painful, with many basic needs going unmet. "Self-esteem is very important and mandatory for a person with no self-esteem as a person is not able to determine identity.

According to Joseph and Juntika Syamsu Nurihsan (2004: 7) states that self-concept can be interpreted as: (a) the perceptions, beliefs, feelings, or a person's attitude about herself; (B) quality of the individual interpretation of himself; and (c) a system of individual meanings and views of others about him. Further noted that the self-concept has three components, namely: (a) perceptual or physical self-concept, (b) conceptual or psychological self-concept, and (c) attitudinal.

Perceptual or physical self-concept is the image of someone about her appearance (attractiveness of the body). Conceptual or psychological self-concept is the concept of a person's ability and inability himself and his future, and it also includes adjustments to quality of life: honesty, self-confidence, independence, and courage. Attitudinal, which concerns one's feelings about himself, his attitude to his presence now and his future, his attitude towards appreciation, pride and humiliation.

The self-concept is also said to play a role in the behavior of individuals because the whole attitude and outlook of the individual against his will affect the individual in interpreting every aspect of his experiences. An event will be interpreted-varying between one individual with another individual, because each

individual has different views and attitudes towards themselves. Interpretations of the individual against the event something much influenced by the attitudes of people towards itself. Negative interpretation of the experience caused by the views and negative attitude towards himself, and vice versa. Furthermore, the self-concept is said to play a role in determining the behavior because the self-concept-determining individual expectations.

This understanding is an important basis for the determination or decision of the right attitude and the right to view and treat who we are. Getting to know who we are can also be interpreted to understand the peculiarities of physique, personality, character and temperament, recognize natural talents he had and has an idea or a clear self-concept with all its strengths and weaknesses. By getting to know who we are one can know the reality ourselves, and at the same time of the possibilities and are expected to know what role he should play to make it happen. The self-concept plays a central role in human behavior, and that the greater the suitability of the self-concept and diminishing inability realistic person concerned and also decreases the feeling disgruntled. This is due to the way individuals perceive themselves to be visible from all his behavior.

The self-concept plays a role in maintaining inner harmony, interpretation experience and determines individual expectations. The self-concept has a role in maintaining inner harmony because if you develop a feeling or perception that is not balanced or contradictory, there will be a psychological situation which is not pleasant. To eliminate the unconformity, he would change his behavior until he felt the balance back and the situation became unpleasant. The self-concept is the core of one's personality development patterns that will affect the various forms of nature. If a positive self-concept, a person will develop qualities such as confidence, self-esteem and the ability to see themselves realistically, so it will foster better social adjustment. Conversely, when a negative self-concept, a person will develop feelings of inadequacy and inferiority. They have doubts and lack of confidence, that foster personal and social adjustment that bad anyway. The self-concept is also said to play a role in the behavior of individuals because the whole attitude and outlook of the individual against his will affect the individual in interpreting every aspect of his experiences. An event will be interpreted-varying between one individual with another individual, because each individual has different views and attitudes towards themselves.

Interpretations of the individual against the event something much influenced by the attitudes of people towards itself. Negative interpretation of the experience caused by the views and negative attitude towards himself, and vice versa. Furthermore, the self-concept is said to play a role in determining the behavior because the self-concept-determining individual expectations. According to some experts, this expectation is at the core of the self-concept. Hope is the destination, the ideal individual who always wanted to accomplish in order to achieve inner balance fun.

The concept itself is very decisive factor in interpersonal communication, because everyone is behaving much as possible in accordance with the concept itself. For example if an individual thinks that he is a fool, that individual would really be stupid. Conversely if the individual feels that he has the ability to overcome the problem,

the problem that faces any can eventually be overcome. This is because the individual trying to live up to the label placed on him. In other words, a lot of interpersonal communication success depends on the quality of a person's self-concept, positive or negative.

Conclusion

From the description it can be concluded that there are some important things, namely: (1) The performance assessment can only be made on the activities in the implementation of the visible or observable when teachers perform their duties, (2) performance assessment related to the time limit limited, (3) the results of performance assessment is only beneficial when it is able to provide an overview of the advantages and disadvantages of workers in performing their duties, the advantages and disadvantages that can only be known if the results of the assessment of performance when compared with the performance standards, (4) the assessment of performance is part of the overall management activities, (5) performance assessment related to the implementation of complex work, therefore it needs to be done in a professional manner so that results can be carried out as a feedback for many other fields.

So principally, the performance is a picture of the work done by a person in a particular period or time, performance can be interpreted also as a product produced by a person (employee, subject teachers, counselors) within a predetermined time with a certain criteria. Its products can be services, specified time unit can each semester, and could be a year or more. While the self-concept is the introduction of ourselves, we can define ourselves symbol, can model ourselves with something that according to our observations of something that resembles ourselves even though it is not a symbol of who we are. Overview (concept) and the symbol of a successful self-made should emerge from an understanding and recognition are getting better about who we are. Self-concept or symbol that can be changed. Changes may occur due to a change in who we are from having been there before. Someone who has done a good management of herself, especially in the management by reducing weaknesses in himself.

After walking sometime after undergoing a restoration effort in earnest someone is experiencing changes, for example, originally did not have a position and dependent on others can turn into has establishments and independent. Everything opposite of self-understanding is getting better.

The more the guidance and counseling teacher has a positive self-concept of her and her profession as a teacher of guidance and counseling it is expected that the higher the performance as a teacher of guidance and counseling in helping learners achieve the desired objectives are able to compete into the world of higher education both in the country and abroad and also entering the workforce.

Because of that, the writer as a lecturer at the department of guidance and counseling as well that once served as a teacher of guidance and counseling in high school/vocational school, both public and private sectors suggested that Teacher of Guidance and Counseling in this case as a person who has expertise in the field of guidance should be able to demonstrate performance capable of helping the learners to understand the talents and

interests that put learners in the right place which in itself helps learners achieve its goals. Therefore, the guidance and counseling teacher should really have qualified so as to achieve the purpose of the school with the outcome as possible.

Furthermore, as a teacher of guidance and counseling should have a positive assessment of her and her profession, it is very important and indeed necessary in the improvement of education goals, and then shows the behavior confident, attractive appearance, pleasant, hospitable, able to create a convenient communication, responsibility, discipline and friends.

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The Effect of Certification and Self-Concept on the Lecturers' Performance of Private Higher Education at Kopertis Wilayah III Jakarta

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ABSTRACT

This research investigates the effect of certification and self-concept on the private higher education lecturer' s performance at Kopertis Wilayah III Jakarta. It was a quantitative research which was conducted to 100 respondents consisted of 50 lecturers PNS-DPK which has been certified and 50 lecturers of PNS-DPK who do not have teaching certificate. After the data was found and analyzed, some findings were found as follows: The performance of certified lecturers is higher than the performance of uncertified lecturers; The performance of lecturers who have positive self-concept is higher than the performance of lecturers who have a negative self-concept; There is an interaction between certification and self- concept; The performance of lecturers who have positive self-concept is higher than the performance of lecturers who have negative self-concept in the group of lecturers who have positive self-concept; The performance of certified lecturer is lower than the uncertified lecturer in the group of lecturers who have a negative self-concept; The performance of lecturers who have positive self-concept is lower than the performance of lecturers who have a negative self-concept in the group of uncertified lecturer.

Keywords: lecturer certifications; self-concepts; performances.

Introduction

Improving the quality of higher education in the era of globalization is a necessity. The quality of a higher education is characterized by academic reputation, the availability of qualified lecturers and supported by a strong research culture and scientific writing of journal. In fact, in those key aspects, the performance of universities in Indonesia is still considered low. Based on Webometrics, South East Asia, Gadjah Mada University is at the seventh ranked, University of Indonesia is at the eighth ranked out of 100 universities while the Private Higher Education (commonly known as PTS) is not on the list. Based on the data can be said PTS has low performance. Colleges as higher education providers are required to produce competent graduates. The aim can be achieved if it supported by the lecturer who has a high performance.

Lecturer is one of the essential and strategic components in a system of higher education. In the Guidelines Lecturer Workload Evaluation and Implementation of the three responsibilities of Higher Education is stated that roles, duties, and responsibilities of the lecturers are very significant in realizing the goal of national education, i.e. educating the nation, improve the quality of Indonesian human, including the quality of faith/piety, character, and mastery of science, technology and art, and to realize Indonesian society developed, just, prosperous and civilized.

In Certification Academic Paper Handbook of Educators 2010 (book I), the types of competencies possessed by the lecturers to get teaching certificate is at least as follows: (a) pedagogical, (b) the competencies of professionals, (c) social competence, and (d) personal competence.

Lecturers who have pedagogical competence is a capable of designing learning, is able to implement the learning process, is able to assess the learning process and results, and is able to make use of research to improve the quality of learning. The ability to design learning is the ability to develop the subjects in the curriculum, to develop the teaching materials, and to design the learning strategies.

Bernandin & Russell (Gomes, 2003: 135) states reformation assessment is "...a way of measuring the contributions of individuals to Reviews their organization". Performance is the outcome resulting from a particular job function or activity during a particular time period, while the performance assessment is a way to measure the contributions of individual members of the organization to organization. Gomes raised many research results show that productivity is greatly influenced by: (1) knowledge, (2) skills, (3) Abilities, (4) attitudes, and (5) behaviors. Robinns (2002: 258), performance assessment has a number of objectives in an organization. The objective performance of assessment such as: (1) management on using judgment to take personnel decisions relating to decision- making for the sale, transfer, or dismissal, (2) assessment provides an explanation of the training and development needs, (3) performance assessment can be used as a criterion for the selection and development program that was passed, and (4) the performance appraisal is used to allocate or specify the award. Noe et. al. (2008: 345) that "skills, abilities, and so on are the raw material of performance. Employees can exhibit behavior only if they have the Necessary knowledge, skills, abilities, and other major characteristics". The main performance is skill and ability. A person's performance can be seen from the behavior.

Nawawi (2008: 236-237) argues: (1) the assessment of the work is a systematical description about the relevance of the tasks given and its implementation by a worker, (2) an assessment of the work is an attempt to identify, measure and manage jobs carried out by the workers (SDM) in the environment of an organization, (3) performance assessment is an activity to identify the implementation of work by assessing its aspects, which focused on the work that affect the success of the organization, (4) the assessment of the performance of the act of measuring as an effort to determine the decisions about the success or failure in carrying out the work by a worker.

The implementation of the law of the Republic of Indonesia Number 14 Year 2005 on teachers and lecturers is done through certification. Lecturer certification implementation which is started from 2008 for state universities (PTN) and private universities (PTS) as it is budgeted by the government. PTS propose lecturers who meet the requirements and is based on a waiting list ranks. Certification of lecturers is the implementation of education policy which aims to improve the

professionalism of educators in implementing its duty. Education policy is one of the public policies. Nugroho (2006: 55) Policy is a series of action that serves as a referral to achieve a goal. Nugroho formulates the public policy as decided by the government, especially the government, as a strategy to realize the goals of the country concerned. Lecturers' performance is also influenced by the self-concept of lecturers themselves as individuals. The self-concept has an important role in determining individual behavior. Or assess an individual perceives himself to be apparent from all his behavior. Rogers (Nye, 1991: 118) said that "self or self-concept develops, the actualizing tendency operate and to actualize this emerging portion of the organism". Rogers refers to the tendency of self-actualization. Actualizing tendency is the motive, the basic that underline the individual. Colquitt (2009: 232) "personality refers to the structures and propensities inside a person that explain his or her characteristic pattern of thought, emotion, and behavior".

Matsumoto & Juang (2008: 330) gives the definition of "self-concept to be the idea or image that one has about oneself and how and why one behaves as one does". It means that self-concept into an idea or a shadow of someone about what they have and how and why people behave. The concept of self is essential to produce culture.

Djaali (2009: 129) said that "self-concept is one's view of himself regarding what he saw and felt about his behavior, the thoughts and feelings, and how these affect the behavior of others". Yusuf and Nurihsan (2004: 7) self-concept can be interpreted as: (a) the perceptions, beliefs, feelings, or a person's attitude about herself; (b) quality of the individual opinion about him; and (c) a system of individual meanings and views of others about him. So far he argued that self-concept has three components, namely: (a) perceptual or physical self-concept, (b) conceptual or psychological self-concept, and (c) attitudinal. The self-concept is the core of one's personality development patterns that will affect different forms of nature.

In this study, the formulations of the problem are: a) Is there a difference between the performances of lecturers who already have teaching certificate with the performance of lecturers who do not have teaching certificate?, b) Is there a difference between performances of lecturers who have a positive self-concept with the performance of lecturers who have a negative self-concept?, c) Is there an interaction between educator certificate of ownership and self-concept?, d) Is there a difference between the performances of lecturer who has teaching certificate and the lecturers who has not teaching certificate in a group of lecturers who have a positive self-concept?, e) Is there a difference between the performances of lecturer who has teaching certificate and the lecturers who has not teaching certificate in a group of lecturers who have a negative self-concept?, f) Are there any differences between the performances of lecturer who have a positive self-concept with the performance of lecturers who have a negative self- concept in a group of lecturers who have had a teaching certificate?, g) Are there any differences between the performances of lecturers who have a positive self- concept with the performance of lecturers who have a negative self-concept in a group of

lecturers who do not have a teaching certificate?

Research Methods

According to Roscoe in Sugiyono (2009: 90) that the appropriate sample size in the study is between 30 and 500. In this study, the population is lecturers of civil servants seconded at private higher education (PNS-DPK) in Kopertis wilayah III Jakarta that has been certified and uncertified. The samples are the PNS-DPK lecturer who has been certified and PNS-DPK lecturers who do not have teaching certificate. The variable of self-concept is divided into two categories namely the lecturers who have a positive self-concept and lecturers who have negative self-concept. The positive self-concept was obtained from the third quartile values while negative self-concepts derived from the value of the first quartile of the instrument of self-concept. Based on these characteristics, the technique of sampling was simple random sampling where the sample size was 100 respondents consisted of 50 lecturers PNS-DPK which has been certified and 50 lecturers of PNS-DPK who do not have teaching certificate.

According to Hinkle (1979: 300) study design used is the design treatment by level two factors or design 2 X 2 factorial designs.

Table 1. Study Design Used

Self-concept (B)	Certification (A)	
	Certified (A1)	Uncertified (A2)
Positive self-concept (B1)	A1	A2
Negative self-concept (B2)	A1	A2

Data analysis techniques of this study include: (1) descriptive data analysis; (2) Normality test using Liliefors and homogeneity test using Bartlett's test; and (3) data analysis inferentially by a two lanes Anova.

Research Result

The data description of lecturers' performance is given below sets forth the average, mode, median, standard deviation, variance, minimum score, maximum score, and range. Below are given the recapitulation of the calculation of the performance scores of lecturers.

Table 2. Statistics Performance Score

Group	Statistics							
		Mo	Me	s	s2	Score Min	Score Max	Range
A	161,13	165,00	163,34	6,03	36,30	148,67	169,33	20,66
A	152,99	148,67	153,84	10,87	118,25	132,33	169,33	37,00
B	161,94	165,00	163,34	5,95	35,45	149,33	169,33	20,00
B	152,18	148,67	153,84	10,20	104,07	132,33	167,33	35,00
A1B1	163,62	165,00	165,33	4,70	22,08	151,00	169,33	18,33

A2B1	160,26	160,33	160,33	6,76	45,67	149,33	169,33	20,00
A1B2	158,64	-	160,33	6,34	40,19	148,67	167,33	18,66
A2B2	145,72	148,67	148,67	9,29	86,22	132,33	158,33	26,00

Sudjana (2005: 466-467) Liliefors normality test is necessary so the statistical tests used in hypothesis testing can be done. This is important because the sample data used comes from normally distributed population. Normality test results by using test Liliefors.

Based on table 2, Lcount <Ltable. It shows that all groups have normal distribution. Homogeneity test variance with Bartlett's test, ga confidence that the variance between groups of variable data grouped have the same performance at a certain threshold value, in accordance with the limit test for variance test. Main effect) are: a) According to Table 4 from lecturer certification (antar A) was obtained F count is 17.75 while the F table was 4.04 (α = 5%). These data indicate that or was rejected. It means that the performance of Lecturers who have been certified is higher than the performance of lecturers who do not have teaching certificate. b) Based on table 4 from certification (antar B) was obtained F count is 25.50 while the F table was 4.04 (α = 5%). These data indicate that or was rejected. It means that performance lecturers who have a positive self-concept is higher than the performance of lecturers who have a negative self-concept.

The interaction effect based on the table 4 for interaction of lecturers' certification and self-concept (Interaction of AXB) F count obtained was 6.12 while the F table was 4.04 (α = 5%). This data shows that or was rejected. It means that there is a significant interaction effect between factor A (Certification) and factor B (self-concept) or certification influence the performance of lecturers.

According to Kadir (2010: 216-217) for testing hypotheses interaction effect is significant, it should be tested influence (simple effect) using t-Dunnet. Before, the difference of the mean between treatment groups to test the differences / similarities of the four treatment groups with the variance application procedure one directions.

Testing simple effect:

1. Testing modest effect on the group B1 (A1B1 Vs A2B1) = 1.23 so then the H0 is accepted.
2. Testing modest effect on the group B2 (A1B2 Vs A2B2) =4.73, then The H0 is rejected.
3. Testing modest effect on the group A1 (A1B1 Vs A1B2) = 1.82. Tcount = 1.82 < ttable = 2.01, then H0 is accepted.
4. Testing modest effect on the group A2 (vs A2B1 A2B2) =5.32. Then the H0 is rejected.

Discussion

First, based on the results of hypothesis test that has been described, it is found that there is an influence of certification on the performance of lecturers.

The performance of PNS-DPK lecturer who has been certified is higher uncertified educator. The lecturer who has been certified lecturer is a

professional lecturer and the right to obtain additional income or benefits lecturer certification. Lecturers who have a teaching certificate is evaluated every semester. If it does not meet the specified conditions allowance dismissed certification. Therefore, the faculty strives to meet the requirements set and even seeks to improve the quality on an ongoing basis. The government made the certification policy with the aim of carrying out their duties in a professional lecturer thus entitled to a reward.

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Second, based on the results of hypothesis test that H0 is rejected. This shows that the performance of lecturers who have a positive self-concept is higher than the performance of lecturers who have a negative self-concept. The introduction to positive and negative characteristics of positive and negative to us will increase the performance, thus he is able to evaluate or judge him, by developing positive traits and reduce or even eliminate the negative traits. Lecturer view or judge themselves will be apparent from the entire behavior associated with the task of implementing the learning. Lecturers who see himself as someone who has the ability to carry out the task, he will carry out the task of learning with full responsibility. Conversely, when the lecturer saw her as a lacking ability to carry out the task he merely obligations when he has potential. The self-concept is closely associated with personality. Personality is used to describe the quality of a person's behavior. In accordance with the Colquitt theory states that a person's personality explain nature on thoughts, feelings, and behavior. The nature shown through customs on the responses given to the environment, such as responsible, critical, neat, or have a good performance. So a teacher who sees himself a good personality to be responsible, critical, neat, or have a good performance. Besides previous study also provides empirical evidence that self-concept has an influence on performance. Third, based on the hypothesis testing results indicate that there are significant interactions between factors lecturer certification and self-concept factors. Lecturers who have had a teaching certificate means certainly have a positive self-concept. If we go back to the lecturer certification assessment Process, where one component is the perception of self-assessment, positive self- perception will describe about the ability, seriousness, responsibility and motivation to actualize himself.

Fourth, based on the results of hypothesis test that Ho is rejected. This means there is a performance difference between the performance of lecturer who has been certified and lecturer who has not had a teaching certificate in a group of lecturers who have a negative self-concept.

Faculty performance is influenced by the concept of self. If an instructor with a positive self-concept will attempt to show the expected behavior by students, and the public. The lecturers will be working hard on the task of learning to produce quality graduates. While lecturers who have negative self-concept, he has the perception that teaching is just obligations, less, or even not develops itself. In a group of lecturers who have a negative self-concept, there are lecturers who already have teaching certificate and some that do not have the teaching certificate. The lecturers who have a negative self-concept and has been certified occurs because the lecturer has met the certification requirements and senior lecturer. Senior lecturer attempted first proposed when compared to junior faculty. Senior lecturer feels he already has experience. Every lecturer who has been certified evaluated every semester. Therefore, the lecturer will attempt to meet the specified conditions. If it has not been fulfilled he will be discontinued as the annuitant certification.

Fifth, based on the results of hypothesis test, H0 is rejected. This means that there is a performance difference between the performances of lecturers who have a positive self-concept with the performance of lecturers who have a negative self-concept on a group of lecturers who do not have a teaching certificate. The government's policy which aims lecturer certification to ensure the quality of education while protecting the profession of lecturers. But the gradual implementation of the certification, so Kopertis give quota to the PTS. PTS Kopertis divide the quota given to the faculty or course of study. The course of study or faculty lecturers who choose to be proposed under prescribed conditions, so that there are lecturers who do not have the certification. In a group of lecturers who do not have the certification there are lecturers who have a positive self-Concept, and there also have a negative self-concept. Based on these descriptions can be concluded the performance of lecturers who have a positive self-concept is higher than the performance of lecturers who have a negative self-concept in a group of lecturers who do not have teaching certificate.

Conclusion

Based on the results of data analysis and hypothesis test done it can be deduced: a) Performance of the lecturer who has been certified higher than the performance of lecturers who do not have teaching certificate, b) Performance of lecturers who have a positive self-concept is higher than the performance of lecturers who have a negative self-concept, c) There is an interaction between certification with self-concept, d) Performance of lecturer who has been certified is higher than the performance of lecturers who have not had a teaching certificate in a group of lecturers who have a negative self-concept, dan e) Performance of lecturers who have a positive self-concept is higher than the performance of lecturers who have a negative self-concept in a group of lecturers who do not have teaching certificate.

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Learning Software Development Civics Model Guided Inquiry Critical Thinking Ability to Train Students

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ABSTRACT

This study aimed to produce a learning device Civics guided inquiry model of a valid, practical, and effective way to train the students' critical thinking skills. Learning software development using Model Dick & Carey and tested in the classroom with the One-group pretest-posttest design. Collecting data using observation, testing, and questionnaires. File were analyzed using descriptive analysis of quantitative, qualitative and test T. From the analysis carried out by researchers in the classroom learning device, trials obtained a valid, practical and effective. Learning device is said to be valid because the average value provided by a civics lesson is over 4 with a 1-5 grading scale, and test results showed Learning valid, reliable and sensitive. Learning device is said to be practical because of the ability of teachers to manage learning showed good or excellent category, and activities of students categorized as effective. Learning device is said to be effective for a student's response to a positive learning, test results of students' classical complete and creative thinking abilities of students has increased. Results of the analysis of the effectiveness of the learning device oriented guided inquiry method can be seen from the teacher's ability to manage learning very well, the activity of students in effective learning, student response to positive learning, mastery learning classically achieved is 93.33%, and creative thinking abilities of all students increased. Based on the results of data analysis can be concluded that the learning device Civics Oriented Guided Inquiry Method developed feasible and can train students' critical thinking skills used in learning.

Key words: Learning Tool Civics, Guided Inquiry, Critical Thinking Skills

Introduction

The 21st Century is a global century. Social life is changing rapidly due to increasingly integrated world especially supported by advances in information and communication technologies so that the boundaries of society and the state have become blurred. The consumers demand high quality production and continuously improved because the professionalism is an absolute requirement in the global life. Included in the global change is the teaching profession are also demanding professionalism. Professional teachers must have a variety of competency, among others, are able to produce human resources who have the expertise, skills and professions that suit their needs and also according to the characteristics and personal aspirations of each student. Today the problem of education is one aspect of life that a lot of attention from the public. Duration is not just the media to convey the culture and pass on from generation to generation, but the changes that can develop creativity in the education world. Education as well as social institutions strong and authoritative to empower all of society develops into a human quality so capable and proactive answer the challenges of the times changing.

Demands for creating a Human Resources (HR) is a reliable and

competitive in this era of globalization, is a challenge that must be answered by the national education. Efforts to create human resources in question can be taken through various aspects of education. However inevitable that the learning process is the most decisive aspect. Through the process of learning expected of quality human resources, quality can also be raised. Therefore, efforts to improve the quality of learning becomes an absolute thing that must be realized in any organized learning at all levels and types of education.

Improving the quality of education through the learning process should be able to fulfill the functions and objectives of national education as stated in article 3 of the 2003 Education Law.

National Education serves to develop the ability and character development and civilization of the nation's dignity in the context of the intellectual life of the nation, is aimed at developing students' potentials to become a man of faith and devoted to God Almighty, noble, healthy, knowledgeable, skilled, creative, independent and become citizens of a democratic and accountable.

This formulation provides a clear direction for the provision of education in general and the implementation of learning, especially. That any organized learning as an attempt to create a human resources that meet the demands of the above-mentioned law is a must.Thus, the output of education that are reliable, competitive and still have a national character is not merely wishful thinking but actually can be realized in the life of the nation.

Efforts to improve the quality of learning is done in the classroom to be an indicator for the success of the institution and indirectly will impact on improving the quality of national education. If the quality of learning that takes place in each class quality, then it is almost certain that the output generated by the institution concerned is also qualified. Conversely, if the learning that takes place in each class are not qualified, then the expectation of quality output was limited to mere wishful thinking.

Therefore, in the national education studies, testing, training and so on continue to be developed as an effort to improve the quality of learning. Various approaches, models, strategies, teaching methods and techniques continue to be developed, implemented and did experiment in order to address issues that arise in learning.

Based on the results of research conducted, Soemantri in Soemantri (2001; 289) states that in the learning of Civics (civic education) there is a tendency of teachers to use teaching techniques "traditional" such as; ground covering technique, drill master, indoctrination, and narrative technique. In fact, learning as proposed by Sumantri mentioned above does not occur only in the learning process in schools such as the results of research. Thinking skills of students is very important for his future. Some experts in the field of learning a similar expression, namely in accordance with the opinion of Gedgrave (2009) that the process of gaining knowledge is more important than the product. For a given learning material Civics particular, which aims to foster critical thinking skills of students in the classroom, teachers can use the approach to make students more active and use the thinking skills of every learning activities in the classroom or in other words, a learning strategy that is used is able to seek for

learning centered on the teacher (teacher-oriented) turn out to be centralized to students (student oriented) or active student learning (SAL / active learning student). The role of teachers only act as a facilitator.

Development teacher learning device should be done before making the learning process. The development of learning tools are expected to help developers' teachers to package and present the subject matter more quality and varied.

Along with the development of science and technology, a lot of learning materials that can be developed to support the achievement of learning as learning innovation. The learning development relies on indicators of learning, teaching and learning strategies that will be used, and the subject to be used in order to attract students towards learning. Development of learning tools in which there are strategies or models should increase the ability to think.

Critical thinking is correct thinking in the search for relevant and reliable knowledge about the real world (Schafersman, 1991 and Chaffee (in Johnson, 2002, p.187)). The most important thing in teaching critical thinking is to create a spirit of critical thinking, which encourages students to question what they hear and examine their own mind to ensure there is no logic to inconsistent or erroneous (Ibrahim and Nur, 2000).

Reality on the ground until the moment that the critical thinking skills students are taught and yet still not be measured or tested. From interviews with teachers at SMAN 4 Polewali in activities, MGMPs states that if students are given examples of questions upon learning of students were able to follow, but if the teacher gives a matter of daily tests that contain aspects of critical thinking that students have difficulty in answering the questions. Learning is not an emphasis on the development of higher level thinking skills (critical thinking skills) tend to condition students into rote learning (rote learning). Students are very easy to forget the material that has been studied before, this kind of learning students do not gain experience developing critical thinking skills. In the view of Slavin (1997), a student must manage their own knowledge by utilizing the brain to think. Learning tools that make students become active can help this process by providing phenomena and questions that exercise critical thinking skills, by learning, designing information becomes more meaningful and relevant to the needs of students. You do this by providing opportunities for students to find or apply your own ideas, and to invite them to be aware and conscious use of reasoning and systematic thinking ability for them to learn.

One of the alternatives that can make students more active in learning activities as well as pay attention to atmosphere and fun as well as closely related to the development of thinking skills of high school students of Neg. 4 Polewali approach is to use guided Enquiry. Enquiry guided learning. Through Enquiry guided also can help teachers link between the material matter Civics with real-world situations learners, and encourage students to make connections between knowledge possessed by the application in their lives daily, both as members of the family and society, with the concept of learning outcomes expected to be more attractive to learners, and can enhance students' thinking skills well.

Noting the objectives contained by subjects of Civics Education then it should be learning in school is an activity favored, challenging, and meaningful to learners. Teaching and learning activities implies the interaction of various components, such as teachers, students, teaching materials and other means. To anticipate one of which must be supported by the development of appropriate learning tools. The use of learning-oriented devices guided Enquiry is expected to help improve students' critical thinking skills as well as the delivery of messages and content at the time, but it also will give a real mastery of concepts realistically.

The development of learning tools is a necessity in natural science subjects responded positively to the developments of information, science and technology and the demands of decentralization. This is done to increase the relevance of learning programs Natural science with state and local requirements.

We make learning-oriented software development guided taught Enquiry can foster better thinking skills so that information obtained through the lesson can cause changes in a positive value on students.

Based on the above, the researchers will develop learning tools Enquiry oriented guidance (includes lesson plans, student guide, worksheets and Assessment Sheets) to train students' thinking skills. By submitting the title "Civics Education Oriented Software Development Enquiry guided to Train Students Critical Thinking Skills".

Research Methods

The study carried out a research on student learning device application (pre-experiment). Before doing the study first conducted the development of learning tools that will be used. The subjects were high school students Neg.4 Polewali class X semester of the 2015/2016 academic year as many as 30 students.

This study used a model of One Group Pretest-Posttest Design (Tuckman, 1978). This study design can be described as follows:

Early Treatment Test Final Test

X O1 O2

Information:

O1 = the initial test, to determine the level of student mastery of the learning materials before being given a guided inquiry learning device models

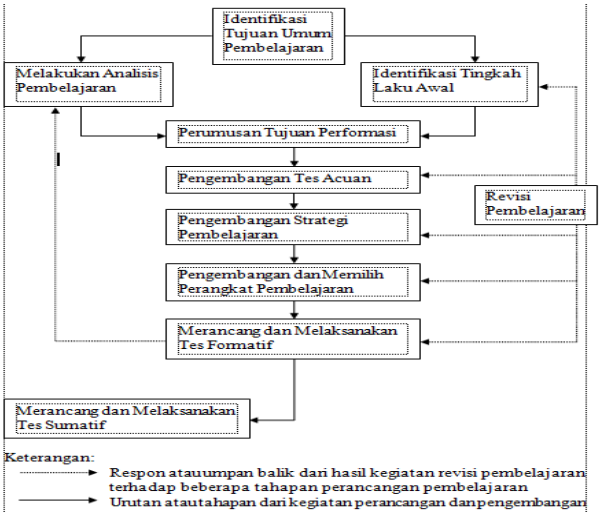
X = Provide treatment on students, namely by providing guided inquiry learning models using critical thinking skills oriented LKS

O2 = final test, to determine learning outcomes and the level of student mastery of the learning material after being given a guided inquiry learning models.

This study consisted of two phases. The preparation phase, the development phase and the implementation phase of learning tools in the classroom. Research procedure using a design development model learning device Dick & Carey followed by testing devices in the classroom.

This model starts with identifying common learning goals. Before formulating objectives performs (special) needs to analyze the learning and behavior early identification of students. When formulated specific goals to be achieved then formulated reference test, meaning the test measures the ability of a special purpose, to achieve specific objectives then developed a learning strategy, the scenario

implementation of learning that is expected to achieve an optimal, after it developed a device lesson fit for purpose, The final step of the design is to perform the evaluation, namely the evaluation of formative and summative evaluation. Formative evaluation is used to assess the program and summative evaluation serves to determine the position of each student in the mastery of the subject matter. Based on the results of this evaluation is then performed feedback in revising learning programs. The learning model Dick and Carey stated on the following figure.



Picture. 1 Diagram Development Kit Model Dick & Carey. Source: (Dick & Carey, 1990)

This study used multiple data collection techniques, among others:

1. Observation

Observational techniques used to obtain research data about the enforceability of the lesson plan, student activities, and barriers for teaching and learning take place.

2. Tests

The test method used to obtain research data on the results of student learning and critical thinking skills of students. Tests performed before the study (pretest) and after three sessions of learning (posttest). Time to do the pretest / posttest 2 hour lesson (90 minutes).

3. Giving Questionnaire

The questionnaire used to elicit student responses and to determine the students' response to guided inquiry learning models using LKS oriented critical thinking skills.

Instruments in this study include:

1. Observation Sheet

a. Observation Sheet for lesson plan implementation

The instrument in the form of a table with columns consisting of aspects observed, enforceability, and assessment. Aspects observed in the study include introduction, core activities, cover, classroom atmosphere, and time allocation of each meeting. The implementation was consisting of two aspects: Yes implemented

and photo. Aspects of assessment, namely: excellent, good, fairly good, less good and not good. These instruments are useful for assessing the quality of enforceability lesson plan that teachers during a lecture.

b. Observation sheet for Student Activities

Observation sheet is used to analyze the activity of student engagement during the learning takes place by looking at the percentage of activities undertaken students during a lecture divided by the overall activities designed multiplied by 100%. Student activity were observed, namely notice / respond / hear the explanation of the teacher or friend, read the teaching material students / LKS, responding to problems / formulating problems / questions, formulate hypotheses, design and conduct observation / experiment, record and analyze the results of observation / experiment, presented observation and discussion classes, making inferences, ask the teacher or friend, and behaviors that are not relevant to the KBM.

Both instruments above observations were respectively held by two observers, so it needs to be calculated reliability. Calculation of reliability of the instrument is done with a technique proposed by Borich (1994) which is a technique interobserver agreement. According to this technique two observers using the same instrument to observe the same variables, then the observations calculated using the formula percentage of

R = 1- (A-B) / (A + B) x 100%

Information:

R = coefficient of reliability

A = Frequency aspects of behavior observed by observers to provide high frequency

B = Frequency aspects of behavior observed by observers to provide low frequency

Observation instruments classified either if the value of the coefficient of reliability obtained> 75%.

2. Student Results

a. Test Results Learning

Test Results Learning (THB) is an assessment tool that contains questions that are given to students to get answers from the students in the form of a written test. This test aimed to measure students' ability to master the material taught and made by grating the preparation of a matter in accordance with the learning objectives to be achieved. THB instruments form in the form of multiple choice questions and commentary / essay. Multiple choice tests used are the usual multiple choice of five possible answers, whereas the description used for the test can record the thought process that shows a higher level of understanding of such critical thinking skills. Student test results used must have good sensitivity index. A sensitive index of an item about a measure of how well items distinguish between students who have received a lesson with students who have not received learning. Calculating the sensitivity of multiple choice items are used the following formula:

(Gronlund, 1982)

Sensitivity = (Ra-Rb) / T

Information:

Ra = Many students who answered correctly in the final test

Rb = Many students who answered correctly on the test early

T = Many students who take the test

To determine the sensitivity of the index items about the form of descriptions using the formula:

Sensitivity = (U12-ΣU21 Σ) / (N (Score max-min))

Information:

ΣU21 = Total score pretest (before learning takes place).

ΣU12 = Total score of post-test (after the learning takes place).

Score max = maximum score achieved for each test item.

Score min = minimum score achieved for each item test

N = the number of students who take the test

According Gronlund (1982), item said to be sensitive if the sensitivity of the items were worth 0.30 up to 1.00. A positive value indicates that the greater the sensitivity of items to the effects of learning also getting bigger (Arikunto, 2010). The completeness of student learning outcomes determined from completeness indicator, individual completeness, and classical. An indicator is said to be complete when> 75% of students achieve the indicator. Minimal completeness criteria (KKM) subjects Civics Class X SMAN 4 Polewali considered completed if the value obtained by 70 or converted by> 2.80. Learning classically said to be complete when> 75% of individuals completed.

b. Skills Assessment Sheet

An assessment tool that contains aspects assessed include the investigation consisted of formulating the problem, formulating a hypothesis, planning an experimental procedure, make observations, analyzing the data and concluded, communicate the results of the investigation consists of the control concept, the appearance of the presenter, and the presenter display. Assessment skills competency achievement is the assessment of the students to assess the extent to which the achievement of competence, especially in the dimension of skill.

c. Attitude Assessment Sheet

An assessment tool that contains characters attitudes manifested in the behavior of students as part of learning. Characters include the competence of student attitudes spiritual attitude (KI-1) associated with the formation of faith and fear of students, social attitudes (KI-2) which includes an attitude of discipline and curiosity. Ratings attitude comes from the results of observation and assessment self-assessment check list or accompanied rubric grading scale

3. Critical Thinking Skills Test

An instrument in the form of an assessment tool that contains questions that are given to students to get answers from the students in the form of a written test. This test aimed to identify and measure critical thinking skills of students in mastering the material that is taught using LKS oriented critical thinking skills. A test of critical thinking skills such as problem description 5 matter consisting of indicators covering critical thinking to formulate the problem, give arguments

(hypotheses), to analyze, summarize and evaluate.

4. Questionnaire Students' Response

Instrument was a questionnaire given to students at the end of the study. Form of the instrument in the form of tables with columns consisting of a description and assessment questions / opinions in which the answer has been determined, the student just choose the desired answer. This questionnaire was developed with the goal of obtaining data on students' response to the learning device, learning, and critical thinking skills of students trained.

5. Barriers Observation Sheet

The observation instruments obstacles during the learning activities. Form of the instrument in the form of tables with columns consisting of the type of barriers and alternative solutions. Intended use this instrument to determine the obstacles that arise in the field for learning. Observations field constraints do two observers while the solution is being negotiated between the observer and the researched.

Data analysis techniques in the study was conducted by using descriptive analysis that includes:

1. A set of Analysis Validation

Analysis result data validity lesson plan, Teaching Materials Students (MAS), Student Activity Sheet (LKS), and test results for Learning (THB) is evaluated by a validator to provide an assessment of the feasibility of its use. The analysis uses descriptive analysis is averaging a score obtained from the validator. The result of the average score is described as follows:

Table 1 Criteria categorization lesson plan votes

Interval Category Rating

SV ≤ 1.0 ≤ 1.5 Ineligible

1.6 <SV ≤ 2.5 Less

2.6 <SV ≤ 3.5 Decent

3.6 <SV ≤ 4.0 Very Worthy

(Adapted from Ratumanan & Laurens, 2011)

Instrument reliability is determined based on the assessment data validator. The level of reliability is calculated using the following formula:

$$R = A / (D + A) \times 100\%$$

Information:

A = the frequency compatibility between examiner (Agree)

D = the frequency mismatch between examiner (Disagree)

R = Reliabilities Instruments (Percentage of Agreement)

According Borich (in Ibrahim, 2005) instrument said to be reliable if the reliability gained ≥ 0.75 or 75%.

1. Analysis of Results of Software Implementation

a. Lesson Plan

Implementation measures learning activities observed by two observers who have been trained so that they can operate observation sheet correctly on the instrument criteria for each phase of learning assessed by providing checklist in column implementation (yes or no) and on columns assessment (5: Very Good, 4: good, 3: Fair, 2: Less good, 1: Not good).

The observations were observed by observers quantitatively analyzed descriptively by comparing the average

scale of ratings given by the two observers with the following assessment criteria:

1.00 ≤ x ≤ 1, 49: Means not good

1.50 ≤ x ≤ 2, 49: Means less well

2.50 ≤ x ≤ 3, 49: Mean pretty good

3.00 ≤ x ≤ 4, 49: Means Good

4.50 ≤ x ≤ 5.00: Meaning excellent

Results and Discussion

Quality Learning Tool

Validation of learning tools developed in this study conducted by two people validator and mentors who showed that: 1) Enquiry guided development results included in the criteria of decent 2) Lesson plan result of the development included in the criteria are eligible and highly feasible for every aspect of the assessment; 3) Worksheet result of the development included in the criteria eligible to every aspect; 4) THB development results is included in the criteria is very feasible for every aspect of the assessment; 5) THB development results is included in the criteria is very feasible for every aspect of the assessment; 6) The test results of the development of critical thinking skills included in the criteria is very decent.

Results of Trial II Learning Tool

The results of this study include the learning process and results are lesson plan implementation assisted inquiry guided, student activities, student responses, and test students' critical thinking skills.

1. Lesson Plan Implementation

Lesson plan implementation results can be seen in Table 1.

No	Aspek yang Diamati	Pertemuan											
		1				2				3			
		P1	P2	Re rata	Ket	P1	P2	Re rata	Ket	P1	P2	Re Rata	Ket
1	Pendahuluan	2,7	2,9	2,8	B	3	3	3	B	3	3	3	B
2	Kegiatan inti	3	3	3	B	3,1	3	3,0	B	3,2	3,1	3,1	B
3	Penutup	3	3	3	B	3	3	3	B	3	3	3	B
4	Suasana kelas	2,7	3,1	2,9	B	3	3	3	B	3,2	3	3,1	B
Jumlah		11,4	12,0	11,7		12,1	12,0	12,0		12,4	12,1	12,2	
Reliabilitas		81,75%				85,09%				89,18%			

Keterangan: SB=Sangat Baik B=Baik

Lesson plan implementation with the inquiry assisted guided performing well with an average reliability by two observers amounted to 80.3%. It shows the activity of a teacher for teaching was appropriate measures guided inquiry learning model. Good lesson plan implementation is supported by the positive response of 83.6% of students interested in participating in KBM to another topic, and as many as 83.3% of students felt new with the way teachers teach, worksheets and classroom atmosphere.

2. Results of Student Activities in Observation

Student activity is any activity carried out during the students' learning activities (KBM). Student activity can be recorded on Table

Observations Activities Students can be seen in Table 2.

No	Activities Students	Meeting (%)			Average (%)
		1	2	3	
1	Pay attention and listen to the teacher's explanation	14.4	15.4	13.7	14.2
2	Working in groups	23.1	22.0	23.2	22.7
3	Discuss with members of the group through a guided inquiry	22.0	25.0	24.9	24.3
4	Answer the questions in Worksheet	9.7	9.5	9.3	10.2
5	Presenting the results of activities	6.8	5.7	4.9	5.8
6	Ask, answer questions and respond to questions	18.2	16.3	16.4	17.0
7	Behavior irrelevant	1.9	0	1.7	1.2
8	Summing up the results of discussions	0.9	4.8	6.8	4.2

3.Response to the Student Learning ProcessStudent responses in this study indicates that learning device received a positive response from students.

The results of student responses can be presented in Table 3.

No	Description	Happy		Unhappy	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	1 How do you think about:				
	a. Subject matter	25	83,33	5	0,16
	b. Worksheet	26	86,66	4	0,13
	c. How teachers teach	23	76,66	7	0,23
	d. atmosphere of learning	24	80,00	6	0,20
		New		Not New	
		Frequency	Percentage (%)	Frequency	Percentage (%)
2.	What do you think about:				
	a. Subject matter				
	b. LKS	24	80,00	6	0,20
	c. How teachers teach	25	83,33	5	0,16
	d. atmosphere of learning	25	83,33	5	0,16
		25	83,33	5	0,16
		Yes		Not	
		Frequency	Percentage (%)	Frequency	Percentage (%)
3.	Are you interested in participating in learning activities such as have you follow today?	26	86,66	4	0,13

In Table 3 shows that the students' response to the components of the inquiry-oriented learning activities Civics guided collected through questionnaires can be stated that most of the students responding to interest in learning chemistry as a guided inquiry aided learning new, good, fun and exciting.

This is supported by observations that demonstrate adherence to lesson plan aspect votes core activities which average 3 categorized either. 86.6% of students interested in participating in learning activities for topics other materials to train students' critical thinking skills. This is in support of student learning outcomes of knowledge that supports mastery learning students individually and classical at 100%.

Based on the above data analysis, it was concluded that the students responded well to the positive and learning to use worksheets to improve students' critical thinking skills. Good response indicates the motivation of students towards learning is also good. Motivation of students supported by the theories of motivation Westwood (2004) the implications of learning that gives awards to be motivated students. This was reinforced by Daryanto (1993) which states that one of the roles and advantages of learning media is to generate motivation. If students are interested in learning then students will be interested in that information from the senses will be more easily distributed to the brain and is not easily forgotten by long-term memory because it has a meaning.

4. Critical Thinking Skills Students.

Data test students' critical thinking skills contained in Table 3 above shows that four of the tested indicators of critical thinking has quite good sensitivity, i.e. answering the question why the indicator of 0.41, the indicator gives grounds ability of 0.54, making the conclusion of 0.59, and indicators to formulate a viable alternative to solve the problem by 0.41. Thus, the critical thinking skills test instrument has good sensitivity and fit for use.

Gain-Score calculation Critical Thinking Ability Test

Student	Gain (g)	Note
1	0.29	g- medium
2	0.66	g- medium
3	0.65	g- medium
4	0.90	g-high
5	0.85	g-high
6	0.48	g- medium
7	0.96	g-high
8	0.89	g-high
9	0.65	g- medium
10	0.82	g-high

11	0.63	g- medium
12	0.77	g-high
13	0.69	g- medium
14	0.64	g- medium
15	0.75	g-high
16	0.64	g- medium
17	0.88	g-high
18	0.84	g-high
19	0.53	g- medium
20	0.63	g- medium
21	0.79	g- medium
22	0.69	g- medium
23	0.72	g-high
24	0.68	g- medium
25	0.68	g- medium
26	0.76	g-high
27	0.66	g- medium
28	0.95	g-high
29	0.78	g-high
30	0.99	g-high
Average score	0.73	g-high

Based on the above data shows that the learning process guided Civics inquiry can improve students' critical thinking skills. This is consistent with Piaget's theory, that the child may think a high level when he has enough experience in concrete and guidance to enable the development of concepts and relationships necessary facts (Nur, 2008).

This is supported by research Buris and Garton, (2007) which states that it takes 10 to 16 weeks to familiarize students in improving critical thinking skills. Meanwhile, according to Vygotsky, learning through guidance occurs through interaction with the teacher or the students are better able to make the thought process is open to all students, both from himself and from other students. In the model of cooperative learning, students are exposed to the thought processes friend their peer (Nur, 2008).

Conclusion

Based on the analysis and discussion can be concluded that the Civics learning device by using the inquiry guided in class X SMA Neg. 4 Polewali produced effectively used in the study in terms of enforceability of the device learning, student activities, Student Activity Sheet, Instrument Evaluation, and most of the students 'responses gave a positive response so that the effective learning devices improve student learning outcomes and students' critical thinking skills.

Based on these findings, this study concluded that the adoption of Enquiry guided the development of learning tools to train Civics thinking skills of students

declared valid, practical and effective for use in learning.

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The Influence Of Effectively Of Supervision, Academic Culture, Self-Learning, And Pedagogic Competence Towards Commitment Of Teacher Profession Of State Junior High School In Duren Sawit District East Jakarta

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ABSTRACT

The purpose of this study was to determine the effect of effectiveness supervision, academic culture, self-learning and competence pedagogic of professional commitment teacher of Junior High School in Duren Sawit District. This research tried to answer problems about effective supervisor with evidence increasing of teacher junior high school. The research was conducted on professional commitment teacher junior high school in Duren Sawit District involving of 86 teacher of Junior High School had been selected from the target populations of 640 teacher of Junior High School by using quantitative approach with path analysis methods. the research of hypothesis testing show: (1) effectiveness supervision had a direct positive effect on professional commitment; (2) culture academic had a direct positive effect on professional commitment; (3) self-learning had a direct positive effect on professional commitment; (4) competence pedagogic had a direct positive effect on professional commitment: (5) self-learning had a direct positive effect on competence pedagogic; (6) effectiveness supervision had a direct positive effect on competence pedagogic; (7) culture academic had a direct positive effect on competence pedagogic; (8) effectiveness supervision had a direct positive effect on self-learning; (9) culture academic had a direct positive effect on self-learning; (10) effectiveness supervision had a direct positive effect on culture academic. Therefore, to improve the professional commitment, State Junior High School in Duren Sawit District needs to increase effectiveness supervision, academic culture, self-learning, and competence pedagogic.

Keywords: Effectiveness supervision, academic culture, self-learning, Pedagogical competence, professional commitment

Introduction

Teacher is one of the most important components of the education system in schools. The progress of a school depends on the quality of the teachers, both in terms of material mastery being taught and delivery techniques appropriate to the learners. Competencies required to be possessed by the teachers include: pedagogical competence, personal competence, social competence, and professional competence acquired through professional education. Teachers as the key to the success of the school should be really aware of their functions and responsibilities. Teachers are required to continuously improve academic quality to perform a maximum academic achievement. The success of teachers in carrying out the duties and responsibilities requires leadership of the principal, who really understand what should be done, so that educational goals can be achieved.

Teacher is one of the factors that can make effort to maximize all

potential/ability of the students to learn so that they can create excellent students. Law No. 14 of 2005 states that teachers as professional teachers should have four competencies, namely: pedagogical competence, personal competence, social competence and professional competence. Law No. 14 of 2005 considers that professional teachers are teachers with pedagogical, personable and professional. Pedagogic and professional competences are very important and decisive for the teachers in conducting teaching and learning process.

Data from the Ministry of Education and Culture in 2012 stated that the average value of national examination of candidates for government school teachers in Junior High School in 2010/2011 for mathematic is only 38.57% from the interval of 0-100. It means that teacher only master 38.57% of the obliged materials. The same thing happened in other areas of study, such as Indonesian teacher only master 40.21%. Those values are far from ideal, where minimum 75%. Consortium of Educational Science (2000) in Broto (2008) argues that "40% of Junior High School teachers and 33% of Senior High School teachers teach subjects outside his field of expertise".

The results of Teacher Competency Test (UKG) held by the Ministry of Education and Culture (Kemendikbud) in November 2015 begins to be published. Education Minister, Anies Baswedan, said that the average value of the national UKG still below standard. "Average national UKG is 53.02, while the government is targeting average value in figure of 55. In addition, the average number of professional competence is 54.77, while the average value of pedagogic competence is 48.94." Based on the results of UKG 2015, published by the General Directorate of Teachers and Educational Personnel of Kemendikbud, there are only seven provinces that the average value of UKG is above the government's target, namely Yogyakarta, Central Java, DKI Jakarta, East Java, Bali, West Java and Bangka Belitung. The report of UKG 2015 results in a more complete will be distributed to schools on mid-January 2016. While training for teachers whose value is still below the standard is planned in May 2016. Each teacher will get the report where in ti there are teacher data along with the 10 components of the assessment. Components that are still red indicate that teachers need training in that field. UKG is like a mirror. From its results, it will be corrected to improve the teachers' competence. Development of the training is done in accordance with the needs of teachers.

The commitment of teachers is a self-bounding to the task and duty as a teacher to emerge the responsibility and responsive and innovative attitude towards the development of science and technology. The commitment of teachers is very important in the effort to improve school performance, both personally and organizationally. Commitment would definitely encourage confidence and performance. The commitment will facilitate the movement of schools to reach the goal. And it is indicated by the creation of the increase, both physical and psychological, so that everything becomes fun for the whole school community.

School as a social construct is an institution that contributes in the process of socialization of the individual to be a member of society as expected. Schools play an important role in efforts to build and develop the culture and civilized

society and the nation as a whole. Academic culture for teachers is to achieve the pedagogical, personality, profession and social commitments that are integrated in teacher performance. Teachers have the referred competence by civilizing themselves to commit academic behavior by conducting learning activities with a good device, having up to date references, doing some research to support scientific work, writing journal articles, joining seminars / workshops, participating actively in various forums, and performing community service to improve the knowledge, skills and welfare of the community.

Commitment is the most expected desire in an organization, because commitment will create an effective behavior. According to Morrow P and J. Goetz (2011: 32), "professional commitment was defined as the extent to which one Identifies with one's profession and accepts its values". Professional Commitment is defined as the extent to which one identifies with one's profession and accepts its values. Furthermore, Robbins and Coulter (2014: 34) said that "effectiveness is often described as “doing the right things” that is, doing those work activities that will help the organization reach its goals ". The concept of modern supervision was formulated by Wiles (2009: 1) as follows; “supervision is assistance in the development of a better teaching learning situation ". In that regard, the academic culture is a culture that is associated with educational institutions and scientific. Sackney (2004: 39) says that, "the academic climate is a resultant of how the school uses rewards and praise, the effectiveness of teachers and the principal, and the collaborative processes that exist within the school".

Self-learning is a relatively permanent change of learning behavior that occurs as a result of experience. It can be said that the changes in learning behavior has occurred and that learning is a change in behavior. Colquitt, Lepine and Wesson (2015: 244) explain that "learning is relatively permanent change in an employee's knowledge or skill that result from experience". Learning is a process of change from someone who learns, the change can be either positive or negative.

Alpelgren and Gietz (2010: 25) describes the definition of pedagogical competence: 'pedagogic competence is the ability and will to regularly apply, the knowledge and the skills that promote the learning of the teacher's students in the best way. This shall be in agreement with the goal that apply, and within the framework available and presupposes the continuous development of the teacher's own competence and instructional design ". Pedagogical competence is the ability to apply knowledge and skills to promote the knowledge of teachers and students. This is in line with the aim to implement the framework of sustainable development available to teachers in instructional and competence design. Pedagogic Competence is one type of competencies that absolutely need to be mastered by teachers.

Methodology

The population was all teachers with civil servant status at Junior High School in Duren Sawit District. The sampling technique used was simple random sampling with the assumption that all the population owned similar characteristics (homogeneous). The study was conducted in East Jakarta. This study uses a quantitative approach with survey method.

Its population is 640 teachers. The sample is 86 teachers selected randomly. The data was collected using questionnaires and analyzed using path analysis.

Findings

Structural equations formed on the model of the sub first structure formed by the path coefficients of the variables X1 to Y, X2 into Y, X3 to Y, and the path coefficient of variable X4 to Y as follows: Y = βy1X1 + βy2X2 + βy3X3 + βy4X4 + βyε1, with the number of (Ry.1234)2 = 0.5164 so βyε1 = 0.695. Therefore, the form of structural equation model first sub- structure: Y = 0.256X1 + 0.260X3 + 0.271X2 + 0.247X4 + 0.695.

Structural equation model of sub-structures are formed on the second formed by the path coefficients of the variables X1 to X4 , X2 to X4 , and the path coefficients of the variable X3 to X4 is: X4 = β41X1 + β42X2 + β43X3 + β4ε2, with the number of (R4.123)2 = 0.2580, so that β4ε2 = 0.861. Therefore, the form of structural equation model second sub-structure: X4 = 0.231X1 + 0.243X2 + 0,239X3 + 0.861

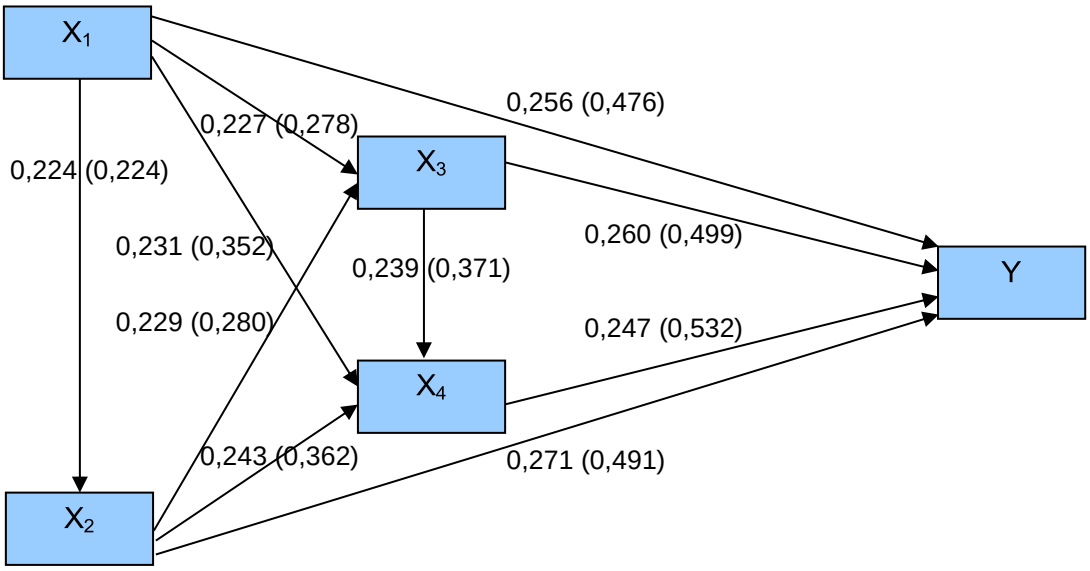

Figure 1. Final Model of Path Diagram

Result of path coefficient calculation can be seen in the following table:

Table 1. Direct Effect between Variables

No.	Direct Effect	Path Coefficient	df	Ttest	T table	
					α = 0,05	α = 0,01
1.	X1 toward Y	0,256	81	3,04 **	1,99	2,64
2.	X2 toward Y	0,271	81	3,22 **	1,99	2,64
3.	X3 toward Y	0,260	81	3,05 **	1,99	2,64
4.	X4 toward Y	0,247	81	2,76 **	1,99	2,64
5.	X1 toward X4	0,231	82	2,32 *	1,99	2,64
6.	X2 toward X4	0,243	82	2,44 *	1,99	2,64

7.	X3 toward X4	0,239	82	2,36 *	1,99	2,64
8.	X1 toward X3	0,227	83	2,15 *	1,99	2,64
9.	X2 toward X3	0,229	83	2,18 *	1,99	2,64
10.	X1 toward X2	0,224	84	2,11 *	1,99	2,64

* = significant (t test > t table with $\alpha = 0, 05$)

** = very significant (t test > t table with $\alpha = 0, 01$)

The results showed that (1) the effectiveness of the supervision gives positive direct effect on the commitment of the profession; (2) the academic culture has positive direct effect on the commitment of the profession; (3) self-learning has positive direct effect on the commitment of the profession; (4) pedagogical competence has positive direct effect on the commitment of the profession; (5) the effectiveness of the supervision has positive direct effect on pedagogical competency; (6) academic culture has positive direct effect on the pedagogical competence; (7) self-learning has positive direct effect on the pedagogical competence; (8) the effectiveness of the supervision has positive direct effect on self – learning; (9) academic culture has positive direct effect on self-learning; and (10) the effectiveness of the supervision has positive direct effect on academic culture.

Discussion

Based on the results of research the discussion is as follows:

First, the empirical results found that there is a direct positive influence of the effectiveness of supervision on the commitment of the profession. The result of this research is in line with the opinion of some experts such as Gibson et.al (2006: 182) states the influence of the effectiveness of organizational commitment as follows, “a sense of identification with the organization’s goal; (2) A feeling of involvement in organization duties; and (3) a feeling of loyalty for the organization. Research evidence indicates that the absence of commitment can reduce organization effectiveness. Committed people are less likely to quit and accept other jobs”. Organizational commitment involves three attitudes: (1) the attitude has the same identification to achieve organizational goals, (2) involvement in the tasks of the organization, and (3) loyalty to the organization. Research evidence shows that the absence of commitment can reduce the effectiveness of the organization. People who do not have a commitment towards the organization can make them easy to resign and accept another job.

Second, the empirical results found that there is a direct positive influence of academic culture on the commitment of the profession. The result of this research is in line with the opinion of several experts; one of them is Robbins (1996: 192) who said that the organizational culture is a system of values and beliefs that are believed to affect the behavior of the teachers. Robbins defines that strong organizational culture is "the organization's core values are both intensely held and widely shared." The commitment of the profession is defined as trust and acceptance of the value from the teachers in working or type of work, and a willingness to maintain membership in their job.

Third, empirical results found that there is a direct positive effect of self-

learning on the commitment of the profession. Zukas (2006: 3) explains that "the good teacher here is someone who is able to participate in global societies and who is able 'to integrate their newly acquired knowledge and skills into their practice in order to prepare today's learners for the challenges of a complex and ever changing society".

Fourth, the empirical results found that there is a positive direct effect of pedagogic competence toward profession commitment. The results of this research is in line with the opinion of several experts such as Spilkova, (2009: 85) that teachers who have professional competence is "based on a theoretical reflection on practical experience and includes knowledge of the subject, skills, attitudes, experience, values and personal characteristics. We emphasize its dynamic conception".

Fifth, the empirical results found that there is positive direct effect of supervision effectiveness on the pedagogical competence. Marzano et. al. (2011: 2) states that "the purpose of supervision should be the enhancement of teachers' pedagogical skills, with the ultimate goal of enhancing student achievement".

Sixth, the empirical results found that there is a direct positive influence of academic culture on pedagogical competence. Zimnyaya (2010: 12) states that "development of competences of the second level-general, i.e., general pedagogical competences. On this basis, special pedagogical competence are formed and developed. Key competencies are fundamental, essential for any person and the level of their development is determined by qualifications and the level of professional activities". Achievement of academic culture is in the form of methodology, scientific theory, behavioral norms, the most advanced technology and academic outlook, spirit, academic ethics, academic aura, academic and academia atmosphere.

Seventh, the empirical results found that there is a direct positive influence of the self-learning on pedagogical competence. The result of this research is in line with the opinion of several experts such as Shani and Lau (2005: 29), who states that "learning is an essential process for attaining individual and organizational success. Learning is defined as the process whereby new skills, knowledge, abilities and attitudes are created through the transformation of experience".

Eighth, the empirical results found that there is positive direct effect of supervision effectiveness on self-learning. The results of this research is in line with the opinion of several experts such as Mullins (2005: 260) who explains that "effectiveness must be related to the achievement of some purpose, objective or task -to the performance of the process of management and the execution of work . Criteria for assessing the effectiveness of manager should be considered in terms of measuring the results that the manager is intended to achieve".

Ninth, the empirical results found that there is a direct positive effect of the academic culture on self-learning. The result of this research is in line with the opinion of several experts such as Murphy (2000: 4) who states that, "academic culture is anything other than achieving the ultimate goal of a tenure-track professorship. More specifically, the epitome of success is a tenure-track job at a major research university. You're still successful, albeit to a lesser degree, if that job is at a liberal-arts college, and even less

so if it's a community college. But a nonacademic career, well, that's just unacceptable". Academic culture exists within a scope of the academic organization both at school or university. In academic culture, there is a definition of culture in general, that is, beliefs and values about how a community of people should behave.

Tenth, the empirical results found that there is a direct positive influence of the effectiveness of supervision on the academic culture. The result of this research is in line with the opinion of several experts such as Furnham (2005: 440) who describes the effect of learning and culture within the organization as follows, "the idea, now very popular of learning organization is essentially one that has the enhanced capacity to adapt, change, grow and learn ... so organizations need to accept and plan for continuous updating of knowledge and techniques; they need to encourage flexibility and innovation and they need to encourage a learning culture".

Conclusion

Based on these findings, the following conclusions are drawn: (1) The effectiveness of supervision has direct effect on commitment to the profession; (2) academic culture directly affect the commitment of the profession; (3) Self-learning directly affect the commitment of the profession; (4`) the pedagogic competence directly affect the commitment of the profession; (5) Effectiveness of supervision directly influence the pedagogical competence; (6) academic culture directly influence the pedagogical competence; (7) Self-learning directly influence the pedagogical competence; (8) the effectiveness of supervision directly affect self-learning; (9) the academic culture directly influence the self-learning; (10) the effectiveness of supervision directly affect the academic culture.

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Students' Perception on the Teacher Role in Teaching and Learning Process at SD Negeri Ma'lengu

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ABSTRACT

The aim of this study was to analyze the students' perception of the role of teachers in teaching and learning in SDN Ma'lengu. The population was all students of SD Negeri Ma'lengu from class I-VI, with the total number was 73 students. The sample was selected using purposive sampling where only graders V-VI with the total number were 23 students. Analysis of the data in this research was descriptive analysis. The results showed that the average of teacher's role in the learning process as perceived by students of class V was 4.69, while the average of teacher's role in the learning process as perceived by students of class VI was 4.61 or are in the very good category. The role of the teacher as demonstrator was done by demonstrating material using pictures and interesting props so that it was easily understood by the students. The teacher's role as manager of the class was done by directing the students to be quiet and focus on the subject matter. The teacher's role as a mediator and facilitator was done by facilitating students to use textbooks. The teacher's role as evaluators is done by giving evaluation to the students to determine the level of students' understanding of the material being taught. The teacher's role as a corrector was done by correcting any bad behaviors of students and directing them to behave well. The teacher's role as a motivator was done by motivating students to study hard to increase their achievement. Finally, the role of teachers as mentors was done by guiding the students to adhere to school regulations, guiding the students who have difficulty in learning. In guiding students, it should be adjusted with students' potential, interests, and talents.

Key Words: Teacher role, students' perception

Introduction

Teaching learning process is an activity which has educational value. Educational value colors the interactions occur between teachers and students. Interaction has educational value because teaching and learning activities are carried out and directed to achieve certain goals that have been formulated before the teaching is done. Teachers consciously planned their teaching activities systematically by utilizing everything for the benefit of teaching.

Teachers as leaders will be apparent in the learning process. In order that this teachers' behavior has good impact on students' learning process, the teachers are required to understand and appreciate their role in teaching and learning process.

Various roles of the teacher in the learning needs to be owned by the teachers because learning is not simply a process of transforming information or skills, but a process which should actively involve students in the development of expected behavior. The learning process is a constitutional process which means that it must be based on objective conditions and development of students. The role of the teacher from the beginning until now remains indispensable. It was the teacher who helped human to discover themselves,

where to go and what to do in the world. Human beings are weak, which in its development requires others' help, from birth to death. Parents enroll their children to school in the hope teachers can educate them to develop optimally.

Interests, talents, abilities, and potential possessed by learners will not develop optimally without the help of a teacher. In this regard, the teachers need to pay attention to individual learners, because between one learner and another have a very fundamental difference. Teachers also should encourage the students so that they dare to do right, and accustom them to take responsibility for their actions.

The role of teachers is needed to support the creation of fun and effective teaching and learning atmosphere and allow students to perform optimally. Even though the educational facilities are excellent, when teachers do not do their job properly then the learning outcomes will not provide satisfactory results and the level of participation and students' involvement in addressing, understanding, digesting the material presented in the learning process will not be optimal.

According to Nur Masjumi (2008: 74), the role and duties of teachers should be selected and defined before the implementation of the teaching and learning process. Therefore, teachers must fully understand their multirole in the learning process, means that the teacher's role is not only one but more than one. The teachers' roles are as demonstrator, class manager, mediator and facilitator, evaluator, proofreader, motivator and mentor.

Yoesoef in Suryosubroto (2000: 80) states that a teacher has three basic tasks:

a. Professional duties of a teacher namely forwarding or transmission of knowledge, skills and values which are not yet known and should be known by the students.
b. Human tasks are the tasks to help the students in order to fulfil their main tasks well as human in the future. The duties of the human are self-transformation, self-identification and self-understanding.
c. Civic duty is a consequence of teachers as a good citizen, to carry out and implement what is outlined by the nation through 1945 and the Guidelines.

New developments to the views of teaching and learning consequences for teachers to improve the role and competence since teaching and learning process and students' learning outcomes are largely determined by the role and competence of teachers. Competent teachers will be able to manage their class that student learning outcomes are at optimal level. Here are the dominant roles of teachers:

a. The teacher as a demonstrator. Through their role as a demonstrator or teacher, the teachers should master the material or subject matter that will be taught and continually improve their ability and knowledge because it will determine learning outcomes achieved by students.
b. The teacher as classroom manager. In their role as manager in the classroom, teachers should be able to manage the classroom as a learning environment as well as an aspect of the school environment that need to be organized
c. The teacher as a mediator and facilitator. As mediator, teachers should have sufficient knowledge and understanding of about educational media because it is communication

tool to make teaching and learning process more effective.

d. The teacher as evaluator. Teachers should be a good evaluator, these activities are intended to determine whether goals that have been formulated is achieved or not, and whether the material being taught is quite appropriate. All these questions will be answered through the evaluation or assessment.
e. Corrector. As a corrector/proofreader, a teacher must be able to distinguish which values are good and which are bad value. Both of these different values should really be understood in the life of society.
f. Motivator. As a motivator, a teacher should be able to encourage their students to be passionate and active in learning.
g. Supervisor. As a mentor teachers should guide students to become competent adult human.

Methodology

This research was a qualitative reach in the form of the students' perceptions about the role of the teacher in teaching and learning process. The data collected through questionnaire and interviewing the respondents.

Findings

1. The role of the teacher as demonstrator

   The results of questionnaire and interview show that the teacher's role as a demonstrator based on the perceptions of students of class V and VI has been very well where teachers are competent in demonstrating the material by using interesting pictures, and answer the questions posed by the students. Similarly, students feel acquire additional knowledge every time they finish studying.
2. The role of teacher as class manager

   The results of questionnaire and interview show that the teacher's role as class manager perceived as very good by the students where a teacher has the ability in giving opportunity for students to ask questions and create a quite environment. Similarly, students are interacting with the teacher in the learning process.
3. The role of the teacher as a mediator and facilitator

   The results of questionnaire and interview show that the teacher's role as a mediator and facilitator was perceived as very good by the students of class V and VI, in which teachers have the ability in using instructional media and facilitate students in obtaining textbooks.
4. The role of teachers as evaluators

   The results of questionnaire and interview show that the teacher's role as an evaluator was perceived as very good by the students of class V and VI, in which teachers have the ability in evaluating in learning, at the end of the semester and evaluating to determine the achievements of each student.
5. The role of the teacher as a corrector

   The results of questionnaire and interview show that the teacher's role as a corrector was perceived as very good by the students of class V and VI. It is because teachers have the ability in correcting the students' behavior in learning activities.
6. The role of the teacher as motivator

   The results of questionnaire and interview show that the teacher's role as a motivator was perceived as very good by the students of class V and VI

where the teachers have the ability in motivating students to study hard, actively participates in class, do the assignment and expand learning time than playing time.

7. The role of teachers as mentors

   The results of questionnaire and interview show that the teacher's role as a mentor was perceived as very good by the students of class V and VI, in which teachers have the ability in guiding students to comply with school rules, give special guidance to students who are less, and guide students to help each other in teaching and learning process.

Therefore, based on the description above, it shows that there is no fundamental difference between the perceptions of students of class V and class VI in assessing the role of teachers in teaching and learning in primary schools Ma'lengu Botolempangan District of Gowa.

Discussion

The results of previous analysis showed that the average of teacher's role in the learning process as perceived by students of class V is 4.69 while the average of teacher's role in the learning process as perceived by students of class VI is 4.61. From the data we can explain that the average of teacher's role in the learning process according to the perceptions of students in class V and class VI is almost the same and are in the very good category.

The role of the teacher in the learning process based on the perceptions of students in grade V and VI class at primary school Ma'lengu Bontolempangan District of Gowa has been very good, where the roles of the teacher in the learning process are as demonstrator, class manager, mediator and facilitator, evaluator, corrector, motivator and mentor.

The role of the teacher in the learning process as a demonstrator as perceived by students in grade V and VI class at primary school Ma'lengu Botolempangan District of Gowa has been very good, which is done by demonstrating material using interesting pictures and props that make it easy for students to understand the materials, answering questions posed by students and increasing students' knowledge each meeting. This is according to Nashar (2004: 78) that through its role as a demonstrator, teachers should always master the material or subject matter that will be taught and continually improve their ability in terms of knowledge as this will determine learning outcomes achieved by students.

The role of the teacher in the learning process as a class manager based on the perception of the fifth and sixth grade students in elementary school Ma'lengu Botolempangan District of Gowa has been very good, which is done by providing the opportunity for students to ask questions and directing the students to be quiet and focus on the subject matter by creating a comfortable atmosphere so that students are not too uptight but also not too casual, but it still needs to be improved in terms of interaction between teachers and students. Through the ability of teachers to manage the classroom, the students are expected to quickly understand the material given, the material becomes simple so that it is easy to be understood in conducive classroom situation and students can learn with full confidence because they considered themselves able to follow the lessons well.

This is according to Nashar (2004: 78) that through its role as the manager of the classroom, teachers should be able to

manage the classroom as a learning environment and also as an aspect of the school environment that need to be organized. This environment is regulated and supervised so that learning activities directed towards educational goals. Good environment is both challenging and stimulating students to learn, giving a sense of security and satisfaction in achieving goals.

The role of the teacher in the learning process as a mediator and facilitator in the opinion of students of class V and VI Elementary School Ma'lengu Botolempangan District of Gowa has been very good, which is done by using instructional media in accordance with the materials taught and facilitating the students to use the textbooks, magazines and newspapers in connection with the material being taught and encouraging the students to study outside by using the environment as a learning medium. This is according to Nashar (2004: 78) that through their role as mediator and facilitator, teachers should have sufficient knowledge and understanding of educational media because it is a communication tool to maximize the teaching and learning process. Thus the educational media is a necessary foundation that is complementary and is an integral part for the success of the process of education and teaching in schools.

The role of the teacher in the learning process as the evaluators according to the perception of students in grade V and VI at primary school Ma'lengu Botolempangan District of Gowa has been very good, which is done by giving an evaluation to the students to determine the level of students' understanding of the material being taught. The teacher evaluates to determine the student's ability whether they are categorized as intelligent, moderate or less; and teachers conduct an evaluation to determine students' achievement. Evaluation system carried out is based on the standards of minimum completeness criteria (KKM) which has been set so that if there are students who did not complete, then the repetition and reinforcement will be done.

This is according to Nashar (2004: 78) that through their role as evaluator, the teachers should become good evaluator, these activities are intended to determine whether goals that have been formulated are achieved or not, and whether the material being taught is quite appropriate. All these questions will be answered through the evaluation or assessment. Through assessment teachers can classify whether students belong to a group of students who are good, moderate, less or good enough compared to their friends in the classroom. Teachers can also find out if the learning process carried out is effective to give good and satisfactory results or otherwise. So it is clear that teachers should be able and skillful in conducting an assessment because through evaluation teachers can determine students' achievement after doing teaching and learning process. Teachers should continuously follow the learning outcomes that have been achieved by students from time to time. The information obtained becomes feedback on the teaching and learning process. This feedback will be used as a starting point to improve and enhance further teaching and learning process.

The role of the teacher in the learning process as a corrector in the opinion of students of class V and VI Elementary School Ma'lengu Botolempangan District

of Gowa has been very good, which is done by making corrections to any poor behavior of students and directing them to behave properly; and to make the students who behave well as an example for the other students. In this case the teacher gives a role model for the students to behave well at school and at home. In addition, school also establishes that one of the objectives of SD Negeri Ma'lengu Botolempangan District of Gowa is implementing the program 5 S (Salam, Salim, Senyum, Sapa and Santun) to the teacher, school residents, and societies.

This is according to Nashar (2004: 78) that through their role as corrector, teachers should be able to distinguish between good and bad values. Both of these different values should really be understood in the life of society.

The role of the teacher in the learning process as a motivator as perceived by students in grade V and VI at primary school Ma'lengu Botolempangan District of Gowa has been very good, which is done by motivating each student to study hard to increase performance, motivating each student to be more vibrant and active in joining teaching and learning process in the classroom, motivating students to work on all assignments and homework given by teachers, and motivating students to pay more attention in school activities than other activities outside of school. To increase students' motivation, the teacher gives praise to the students who earn good grades and students who work on a job. This is according to Nashar (2004: 78) that through its role as a motivator, a teacher should be able to encourage their students to be passionate and active in learning.

The role of the teacher in the learning process as a mentor in the opinion of students in grade V and VI at primary school Ma'lengu Botolempangan District of Gowa has been very good, which is done by guiding the students to adhere to all the school rules, the teacher guides specifically for students who have difficulty in learning, and teachers guide the students to help each other in the learning process. In guiding students, it should be adjusted with the values, interests, and talents of students. This is according to Nashar (2004: 78) that through their role as mentors, teachers should guide students to be skillful human.

Conclusion

Based on the analysis and discussion that has been done, it can be concluded that the average teacher's role in the learning process as perceived by students of class V is 4.69, while the average of teacher's role in the learning process as perceived by students of class VI is 4.61; both are in the very good category.

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The Evaluation of Risk Management Certification Program for the Directors, the Commissioners and the Officers of Commercial Bank

Dewi Gunherani

ABSTRACT

The objective of this research was to evaluate the risk of management certification program for the directors, the commissioners and the officers of commercial bank in Jakarta, Bandung, Semarang and Surabaya area. The evaluation focused on the discrepancy evaluation model the steps were design (urgency and design), instillation (planning), process (implementation), product (outcome and impact) of risk management certification program. Qualitative approach used in this research with program evaluation design. Program evaluation used in this discrepancy model. Data were collected in-depth interview, observation and documentation study. Interview conducted with the directors, the commissioners and the officers of commercial bank as a key informant. Data analyzed quantitatively stage that was data reduction, data display, and conclusion drawing. The results of this research concluded that aspect of design, installation process and product of risk management certification program meet or in accordance with the criteria that established to evaluate risk management certification program. The only aspect of supervisory from program owner is not in accordance with the criteria. Therefore, risk management certification program must be continued and take improving on supervisory aspect.

Keywords: Discrepancy evaluation model, program evaluation, certification, and risk management.

Introduction

The banking industry is one important pillar in encouraging the development of national economy. Banking can be regarded as an agent of development or the government's main tool in efforts to develop the nation's economy. In the Indonesian Banking Booklet 2012, stated that the primary function of banks in Indonesia are as collector and distributor of public funds and aims to support the implementation of national development in order to improve the distribution of development and its results, economic growth and national stability, towards improving the standard of living of the people. Thus the banks have a very strategic position and vital. Therefore, any changes that occur in the banking sector will lead to implications for other sectors.

One of the fundamental things in order to realize is a healthy banking risk management. Bank risk management is fundamental in realizing the bank has a risk management competition. The implementation is as a manifestation of the precautionary principle is also very important in realizing one of the pillars of the Indonesian Banking Architecture (API), which creates a strong banking industry and have high competitiveness and resilient in the face of risk. Therefore, one of the steps taken by the Bank Indonesia improve bank risk management

is organized risk management certification program stipulated in Bank Indonesia Regulation Number 11/19 / PBI / 2009 on Risk Management Certification for Management and Officers of Commercial Banks.

The Risk Management Certification Agency (BSMR) and the Banking Profession Certification Institute (LSPP) conducted implementation of the risk management of certification program. The development of the risk management of policy implementation certification for the management and officers of commercial banks are still slow, because there are many management and executive officers who do not have the certification is still constrained by infrastructure for the implementation of risk management certification.

Research Questions

The problems of this research are (1) How to design a risk management of certification program for the management of bank and commercial bank officials?; (2) How is the installation of risk management certification program for the management of bank and commercial bank officials ?, (3) How is the certification program risk management for the management of bank and commercial bank officials?; and (4) How is the product risk management professional certification program for the management of bank and commercial bank officials?

Evaluation Program

Evaluation by Mertens and Wilson (2012: 5) is the process of investigation applied to gather and synthesize the evidence that led to the conclusion of a situation, value, price, significance or quality of a program, product, people, policies, proposals or plans. The conclusions made in the evaluation stressed that the empirical (sometimes in the form of case) and normative aspects (an assessment of the value of something). Another definition is expressed Stake (2004: 5), evaluation means the comparison of the condition or performance of something against one or more standards. This indicates that the evaluation of one of them characterized by the attempt to compare current conditions with a predetermined standard. The next concept that needs to be explained is the program. Langbein, Felbinger, and Langbein (in Royse, Thyer, and Padgett, 2010: 6) gives a definition as conclusion program of organized activities designed to achieve specific goals. The important aspect is contained in the definition of the activities organized. In this case the program is not random, but a set of actions planned sequence of actions that are designed to solve a problem. If there is no problem, it does not need the intervention program. Thus, the program is an intervention or service which is expected to have an impact on program participants.

Furthermore, it is associated with the concept of program evaluation, Grinnell and Unrau (in Royse, Thyer, and Padgett, 2010: 12) states that the evaluation of the program means a form of assessment using research methods. They are valid and reliable in order to test the process or the outcome of existing organizations to meet social needs, Program evaluation is a research application that is used as a managerial process. Then Newcomer, Hatry, and Wholey (2010: 5) explain the evaluation program means the systematic application of the method to ask questions

about the implementation and results of the program.

In another view, Langbein, Felbinger, and Langbein (2003: 3) state evaluation is an application program on empirical social science research methods to the process of assessing the effectiveness of the program or project, both related to the management and implementation with the intention of taking a decision. According to Weiss cited Vedung (2009: 6), program evaluation aims to measure the impact of a program against the goals set to be implemented as a way to contribute to the decision making the next decision about the program and improve the program in the future.

Particularly in education, according to the Worten and Sanders (in Tayibnapis, 2000: 45) said that the evaluation has an important role among other things, information used as the basis for: (1) make policies and decisions, (2) Assess the results achieved students, (3) assess the curriculum, (4) gives credence to the school, (5) to monitor the funds already granted, and (6) to improve the material and educational programs.

One model of evaluation that can be used to do a program evaluation is an evaluation model gap (The Discrepancy Evaluation Model) was developed Malcolm M. Provus (1971) believe that evaluation is an art (art) depicts a discrepancy between the standard of performance with the performance of that happening. Evaluation inequality consists of five stages, namely (Provus, 1971: 199-120):

First, design. In the design phase of this program, a fundamental aspect needs to be done is defining the program. Definition of program obtained from a meeting of all levels of program staff. This definition is used as a standard against which the program will be evaluated.

Second, the installation. During the installation phase, the program design is used as a standard to consider the operational steps of the program. An evaluator needs to develop a comprehensive set of congruence tests to identify any gaps between the installation of a program or activity that is expected and the actual.

Third, the process (Process), at this stage of evaluation focused on how to obtain data on the progress of program participants, to determine whether the behavior is changed in accordance with the expected or not. If it does not, then it is necessary to amend the activities aimed at achieving the objectives changes.

Fourth, the product (product), at this stage of the evaluation is done to determine whether the final goal is reached or not. Provus distinguish between the impact of the terminal (immediate outcomes) and long-term impact (long term-outcomes). With this in mind not only encourage the evaluators to evaluate the results in the form of program performance, but more than that the need to conduct further studies as part of the evaluation.

Fifth, comparison program. This stage is the stage of optional. This stage is also closely related to the cost-benefit analysis (cost-benefit analysis), where the results are compared with the costs incurred. These analyzes are extremely vital in the state of resources (in particular the cost) educational development is very limited (limited resources).

Certification

Certification is a form of recognition of the competence of a person on a particular

field. Recognition obtained after a series of processes to prove one's abilities. Conceptually Scarborough (2014: 2) gives the definition of certification is a confirmation of the characteristics of objects, people and certain organizations. External reviewers, educational institutions and appraisers often carry out confirmation. Another concept is described by ISO 2006 cited by Diaz-Chavez and Woods (2012: 226), namely the issuance of a written assurance (certificate) by an independent agency or externally, i.e certification bodies, which have been audited and have the organization's management system and verified that the agency has according to the standard.

Mulyasa (2007: 83) explains that the certification is a process competency test for people who want to acquire or improve the recognition and competence in accordance chosen profession. This certification is as proof of recognition of the competence that meets the standards for doing the work in accordance with the profession. In other words, certification is the fulfillment of the need to improve the professional competence. Therefore, the certification process is seen as an essential part of efforts to obtain a certificate of competence in accordance with established standards.

Basically, the conduction of certifications have many goals and benefits. Some of the main objectives of teacher certification, namely: (1) Determine the feasibility of the competence of a person, (2) as an agent of learning, (3) improve the process and quality, (4) increase the dignity, and (6) Increasing professionalism (Sujanto, 2009: 9).

Risk Management

In concept, risk is defined as the probability of not achieving the expected profit rate or the possibility of return received deviate from the expected return. The greater the deviation the greater the profit rate risk level (Sartono, 2001: 42). Then Cade (1997: 73) defines risk as exposure to uncertainty of outcome, against the uncertainty of the results. Another opinion states that the risk can be interpreted as a form of a state of uncertainty about a situation that will happen later with the decision taken by the various considerations at this point (Fahmi, 2011: 2).

Risks faced by the bank should be managed properly so as not to cause harm to the banking sector. Siahaan (2002: 51) explains that risk management in an effort to establish some policies within an organization so that risks will occur can be eliminated or minimized as far as possible by way of the functioning of the units that already exist.
Then, Tampubolon (2004: 33) states that risk management is an effort to establish some policies within an organization so that risks occurred can be eliminated or minimized as far as possible by way of the functioning of the units that already exist. According to Djohanputro (2004: 27), risk management through a number of stages, such as risk identification, risk measurement, risk mapping, risk management model, supervision and risk control.

Furthermore, Hanggraeni (2010: 3) explains that risk management is a series of procedures and methodologies used to identify, measure, monitor and control risks arising from the business operations of a company. Risk management is closely related to the company's sustainability. If

the company carries out the management of risk, the company can avoid bankruptcy, or even be able to generate increased profits.

Risk management is intended to ensure the sustainability, profitability and business growth in line with the vision and mission of the company. In the control strategy and risk management efforts, the company identification and risk maps (risk mapping), quantification and measurement of risk (risk measurement and assessment), risk management (risk treatment), as well as risk management policies (Hanggraeni, 2010: 3).

Risk Management Certification Program

Risk Management Certification Program for the Management of the Bank has a legal basis, namely Bank Indonesia Regulation Number: 11/19/PBI/2009 concerning Risk Management Certification for Management and Officers of Commercial Banks. In Article 2, paragraph (1) of Bank Indonesia Regulation Number 11/19/PBI/2009 confirmed that the. Bank is obliged to apply effective risk management and planning. As explained in Bank Indonesia Regulation Number: 11/19/PBI /2009, there are a number of important considerations under which the Risk Management Certification for Management and Officers of Commercial Banks, namely: (1) internal and external development of the banking system is undergoing rapid change, (2) the increasing complexity of risk, (3) to support the implementation of risk Management for the business of the Bank is required Management of the Bank, (4) improving the competence of the Management of the Bank, (5) to support risk management for the Bank's business, (6) to reach terms minimum and standardization of competence and expertise for the Management of the Bank, and (7) creates risk awareness is very necessary in the Bank's business activities. The main objective is the Risk Management Certificate Printing qualified human resources in the field of Risk Management that has professional standards and codes of conduct are good to improve the quality of Indonesian banking risk management and good corporate governance in order to compete in the global era.

Relevant Results

Research relevant to this study is a survey conducted by the Bureau of Research Infobank (BIRI). InfoBank Research Bureau conducted a survey of several bankers who were randomly selected with purposive random sampling method. Respondents were divided into four groups of banks, the regional development banks (BPD), state-owned banks, private banks and joint venture banks and foreign. As for the points of the findings of the survey are as follows:

First, the majority of bankers agreed risk management certification program applied for bankers, because their risk management certification will broaden and improve the knowledge of bankers on risk management.

Second, bankers tend to agree risk management certification program is needed to standardize the ability of bankers. Nevertheless, the results of analysis per group of banks showed that only bankers BPD groups that agree on that.

Third, bankers assess implementation during the certification exam is conducted BSMR going well. Analysis per bank group

shows, a banker from BPD group and state banks assess implementation certification exam went well.

Fourth, the quality of training providers provide training for bankers who will take the certification exams of risk management is considered good by most bankers. The bankers also assess the existence of training providers can assist them in risk management certification exam preparation.

Fifth, the cost of certification is still a sensitive issue that is becoming one of the things that weighed down the banks. The InfoBank of Research Bureau survey results show a majority of bankers still regard the training costs of training providers as well as the cost of expensive risk management certification exam.

Sixth, to exam level 1 and level 2, level of difficulty of the test material on both of these levels is still considered the standard, while the level 3 exam content rated bankers tend to be difficult. For the assessment of the appropriateness test materials to the needs of bankers, exam level 1 rated appropriate. However, for test level 2 and level 3, the bankers tend to doubt the appropriateness of the level two test materials to the needs of bankers.

The previous studies was conducted by the Bureau of Research Infobank (BIRI) associated with a certification program risk management program above has at least two major differences when compared to this study, namely: First, from the aspect of research methods, research conducted InfoBank Research Bureau uses a quantitative approach with survey through questionnaires, whereas this study used a qualitative approach to data collection through interviews. Second, the research conducted InfoBank Research Bureau is only focused on the process of implementation of the program, while this study attempted to evaluate the evaluation model of the gap (Discrepancy Evaluation Model) which includes program design, installation program, the running program and program product. Therefore, this study provides a more comprehensive picture of evaluating risk management certification program.

Research Method

In accordance with the formulation of the problem, the objectives of this study were: (1) conduct an evaluation to obtain feedback for improvements related to the risk design of management certification program for bank management and bank officials public, (2) conduct an evaluation to obtain feedback for improvements associated with the installation program risk management certification for the management and officers of commercial banks, (3) an evaluation to get feedback for improvement related to the implementation of risk management certification program for the management and officers of commercial banks, and (4) conduct an evaluation to obtain feedback for improvements related to product management certification program the risk for the general management and executive officers.

This study used a qualitative approach with descriptive methods. The study design used program evaluation and evaluation model chosen was the evaluation gap (discrepancy evaluation model), comparing the criteria with findings in field. The data were collected in-depth interviews, observation and documentation. In-depth interviews with key informants consisting of management and executive officers, risk management certification program organizers and

participants of risk management certification program. The data were analyzed qualitatively through the stages of data reduction, data presentation, and drawing data using code for calculating. Validity analysis of the data was done by triangulation.

Findings and Discussions

The Evaluation Design Phase

Evaluation was conducted in the design phase of the program consists of two components, namely the urgency associated with the implementation of the program and the design of risk management certification program. The results of the evaluation of the component design phase are urgency gap indicates that risk management certification program for the management and officers of commercial banks meet the exigencies, which include:

First, the urgent need is associated with coping the increasing complexity of banking business at this time. It is to overcome the effects of the external environment and internal bank, the increasing complexity of the risks faced by banks, to support governance practices in banking (GCG), to improve the quality of the management of each activity functional bank especially in the risk management process that is accurate and comprehensive, improve the competence of management and executive officers in mitigating risk, and to support the six pillars of the Indonesian Banking Architecture (API).

Second, the mapping is as input and consideration in making decisions. Mapping data was conducted by Bank Indonesia is to conduct academic studies on the importance of risk management certification, ask for input and consideration of academics and study visits to other countries in order to get the exact model on a certification program that will be implemented. Third, the analysis of the potential institutions that used to determine the readiness of the certification institute risk management and to ensure the implementation of the program can work well as expected. Analysis of the potential of the institution conducted by Bank Indonesia as the owner of the program is to do an analysis of the readiness of human resources, facilities and infrastructure readiness, preparedness budget and policy support.

While, the evaluation results indicate that the risk management certification program for management and officers of commercial banks have had a good design. It is indicated by:

First, there is a clear program goals is to print the qualified human resources in the field of risk management that has professional standards and codes of conduct are good to improve the quality of Indonesian banking risk management and good corporate governance in order to compete in the global era.

Second, there is policy based strong to support the smooth and legality of the program, namely support in the form of laws or regulations of Bank Indonesia. Third, the objectives of clear program are in the form of anticipatory objectives that consist in increasing the ability of officials and the management of banks to mitigate risks due to their great potential over banking risks because of the increasing complexity of banking business.

Fourth, a clear orientation program that is aligned with the goals and objectives include increased competence of the management and risk management officer. Fifth, the involvement of relevant parties (stakeholders) in the formulation of the

program in the hope of getting a lot of feedback program that can be run properly and provide more benefit. The parties engaged by Bank Indonesia in the preparation of risk management certification program that is BI, GAP, BNSP, Banks Association, IBI, and Asbanda.

Sixth, the size of the success of the program that will be used to conduct an evaluation when the program was run so as to know the level of success. To use success measures such as increasing the number and quality of graduates.

Seventh, the formulation of risk management certification program benefits both general and specific benefits and good for bank officials, Bank Indonesia and participants of certification.

Evaluation phase Installation

The results of the evaluation phase of the installation gap risk management certification program for management and officers of commercial banks have had a good plan that can be seen from the following aspects:

First, the implementation guidelines are for the program that serves as a guide for implementing a program created by BSMR and LSPP as program management bodies. Guidelines referred to the Regulation of Bank Indonesia and the Handbook for the Implementation of Risk Management Certification.

Second, the planning of the recruitment and selection by setting criteria or qualifications for staff and a good instructor associated with quality and quantity. Planning contained in the guidebook organizing certification program as a reference for receiving and selecting instructors and staff organizers.

Third, the risk management certification curriculum planning compiled by BSMR and LSPP as program organizer. The planned curriculum tailored to the practical needs in the field for officials and administrators of the bank so that certification can actually provide benefits to participants. Fourth, the examination schedule of the program is to provide certainty for administrators or officials who will follow certification by creating schedules that are arranged in a calendar year. Fifth, the program instructor planning both is concerning the amount and instructor competence and qualifications needed to support the implementation of risk management certification program. Sixth, the planning of the evaluation of each institution is namely the certification of BSMR and LSPP and from BNSP. But from Bank Indonesia as the owners do not yet have planning program evaluation for risk management certification program. Seventh, the graduation-planning program is for determining the graduation of participants. Graduation of the form refers to the cognitive aspects of knowledge and skills, and aspects of the behavior. Eighth, the planning and monitoring of BSMR LSPP and BNSP. While BI as the program owner has no plans of monitoring to supervise the risk management certification program.

Evaluation Process stage

The results of the evaluation phase of the process in general gap shows the implementation of risk management certification program for the management and officers of commercial banks went well. It can be seen from the following:

First, the timely implementation of the training, attitudes and behaviors that support instructors, learning model application that is easy to understand, enabling communication in the classroom,

and an evaluation of feedback from the instructor.

Second, the implementation of the curriculum that has followed the planning that has been made, the delivery of the curriculum in a systematic, renewal theory according the latest developments, and the balance between theory and practice.

Third, the training activities are conducive to the business indicated trainer to use the medium of learning in order to facilitate exposure of the material, the interaction of participants with the instructor in the form of question and answer and discussion, and conduct case studies to solve the actual problems that developed in the banking world.

Fourth, the implementation of more evaluation was conducted internally by the organizing institutions, namely BSMR and LSPP to obtain feedback program improvement and also from BNSP. While Bank Indonesia is as the owner of the program is not to evaluate the risk management certification program.

Fifth, the implementation of the monitoring has been carried out by the organizing institutions BSMR program and LSPP and BNSP to ensure any activities related to the implementation of the program running appropriate with the plans that have been made. Meanwhile, the Bank Indonesia as the owner does not conduct monitoring program. Sixth, the obstacles encountered related to the implementation of certification in risk management is the lack of supervision of the program owners institutions (Bank Indonesia), not all of the banks involved, and certification schedules that are often concurrent with the bank working hours. Supporting factors, namely the adequacy of infrastructure or infrastructure, an adequate number of assessors, the support of the relevant parties, and the availability of information technology systems, bank participation and support of Bank Indonesia.

Product Evaluation Phase

Evaluation was conducted in the phase of the program consists of two components, namely related to the achievement of program outcomes and the impact of risk management certification program. The results of the evaluation of the gaps are the phase of the program as seen from the output component achievement. The impact of the program shows the results of the implementation of risk management certification program has some impact on increasing competence and a culture care risk (risk awareness culture) among bank managers and officers can be broken down as follows:

First, there is competence improvement among public officials and the management of banks in risk management demonstrated by its ability to minimize bad debts, and they have an action that is more cautious in carrying out its duties. Moreover, it also can be seen an increase in the number of officials and officers who have a certificate of risk management. Second, the increased risk care culture among both management and bank officials risk managers and bank management. It was shown with the improvement of observance of procedural organizers and bank officials after the certification of risk management and the establishment of a special unit that is handling the bank's risk. It is just reward and punishment has not done well for managers and officers in charge of risk. While, the results of the evaluation phase of the product gaps was as seen from the program. It shows that the impact of the

components of risk management certification program for the management and officers of commercial banks on bank performance is still limited, especially against bad loans and ROA, while the bank's earnings and capital adequacy of banks has not been seen. Data bank's financial performance period 2000 -2011 can be seen in the following table:

Table 1. Banking Financial Performance Ratios Period 2000 - 2012

Year	Year	Banking Financial Ratio (%)			
		NPL	CAR	NIM	ROA
Before Implementing Risk Management Certification Program	2000	6,1	12,45	4,5	1,56
	2001	4,28	20,5	3,69	1,45
	2002	7,5	22,44	4,14	1,96
	2003	6,78	19,43	5,39	2,63
	2004	4,5	19,42	6,33	3,46
Implementation of Risk Management Certification Program	2005	7,56	19,3	5,74	2,55
	2006	6,07	21,27	5,96	2,64
	2007	4,07	19,3	5,91	2,78
	2008	3,2	16,76	5,84	2,33
	2009	3,31	17,42	5,77	2,6
	2010	2,5	17,18	6,06	2,86
	2011	1,16	16,05	6,1	3,03
	2012	1,87	17,43	5,49	3,11

For the ratio of non-performing loans (NPL) shows enforced since the risk management certification program, namely in 2005, there was a trend decline in the value of NPL. In 2005 NPLs as a whole is still quite high, namely 7.56% and gradually decreased until the last in 2012 amounted to 1.87%. It shows the positive impacts of risk management certification program enactment of the credit quality banks in general.

In the CAR ratio moved slightly volatile both before and after the application of risk management certification program. This can give you an idea that the application of risk management certification program does not appear to provide a significant impact on banks' capital adequacy.

For net profit, the data show that during implemented risk management certification program, starting 2005 to 2012 tends not to fluctuate significantly or move datar.Ini reflect that national banks do not increase or decrease the significant net benefits to their risk management certification program . As for the ROA, seen a growing trend in the period ROA implementation of risk management certification program, i.e from 2005 to 2012. This could be an indication that the certification program can improve the bank's ability to generate profits through its assets.

Discussions

Based on the analysis that has been described above, the further discussions

were held. The discussion carried out by hooking up with theories and actual conditions in accordance with the existing problems.

Evaluation Design Phase

Evaluation of the design phase is focused on two components, namely urgency and program design. Discussion of the results of the two components is explained as follows. First is the urgency of the implementation of risk management professional certification. Criteria for a good program and give benefits based on the existence of urgency, so that a program that is implemented will not be in vain. Therefore, a program must have a rational background and strong to give expediency. Similarly, the risk management certification program, should also be supported by the exigencies that can provide real benefits, especially for the health of banks. There are at least three aspects that can be explored, particularly with respect to urgency conducted risk management certification program, which needs urgent, data mapping needs, and the potential of the institution.

With regard to the convening of an urgent need for risk management certification program, the results of these shows have been MEET research criteria urgent program to be implemented. Referring to the considerations contained in Bank Indonesia Regulation No. 11/19 / PBI / 2009 on Certification of Risk Management, then some urgent needs that can be identified, that address the complexity of business banking at the moment, to overcome the effects of the external environment and internal bank, the increasing complexity of the risks faced by banks, to support governance practices banking governance (GCG) is healthy, to improve the quality of the management of each functional activity of banks, especially in the risk management process that is accurate and comprehensive, improve the competence of management and executive officers in mitigating risk, and to support the six pillars of the Indonesian Banking Architecture (API).

With regard to the complexity of banking, it is known that banking is a very complex type of business. It was as disclosed by Hardanto (2006: xvi) that the banking industry is an industry in which the terms of the risks, especially since it involves the management of public money. It is played in the form of investment, such as loans, the purchase of securities and other forms of investing other funds, increasingly complex risks requiring the practice of good corporate governance and risk management functions for the business bank. The findings of this study showed that the risk management certification program has urgency in coping with the complexity of today's banking business, which is to develop the competence of management and executive officers. With the competence, the management and executive officers will have the knowledge, skills and attitudes that support for the increasingly complex banking operations. It is necessary for the further urgency to overcome the effects of the external environment and internal bank. Banks is in the operations greatly affected the internal and external environment, and thus require good management, one of them in terms of risk management. The complexity of internal and internal factors can affect the health of banks, so banks need to prepare ourselves as well as possible. Internal factors mainly related to bank management factors and human resources, while

external factors, particularly related to the condition of the national economy as reflected in terms of economic growth and inflation (Hendrayanti and Muharam, 2013: 4). The results of this study indicate that urgent or urgent certification program to be implemented in order to deal with internal and external changes environment.

The next urgency is increasingly complex risks faced by banks. Along with the changing internal and external environment that is fast, it will result in greater risks in the banking industry. With the increased risk, the bank must be prepared to develop human resources who are competent in dealing with risk. The importance of setting up human resources in managing risk as the complexity of bank risks is also expressed by the Sari (2012: 3) that this decade the Indonesian banking industry is faced with the risk of increasingly complex. Due to the bank's business activities are diverse experiencing rapid development, so as to oblige banks to raise the needed would the application of risk management to minimize the risks associated with bank business activities. It is clear that the insistence of the complexity of banking risks requires anticipation of banks to provide management and bank officials who are competent to handle the risk. The further urgency is to support governance practices in banking (GCG) is healthy. Good risk management plays an important role in supporting the banking implemented good governance. This was due to good banking governance requires prudence factors are closely related to risk management. The importance of risk management in relation to the implementation of good corporate governance (GCG) put forward by Sari (2012: 18), that the implementation of good corporate governance (GCG) in the bank cannot be separated from the application of risk management, which in practice risk management and corporate governance have the same principles transparency, accountability, responsibility (responsibility) and independence.

The urgent need or urgency associated with the subsequent risk management certification program is to improve the quality of the management of each functional activity of banks, especially in the risk management process that is accurate and comprehensive. With the risk management certification program, it is expected to increase competence and awareness of managers and officers to the problem of risk. With the competence and awareness, the course will be followed by the quality of process of a bank, the better. The results of this study indicate that the risk management certification is considered to help officers or bank officials in managing the functional activity of the bank.

Urgency is related to improving the competence of management and executive officers in mitigating risk. This certification program is a process of education and training, in which there are training activities. As we know that education and training is an effort to improve the knowledge, skills and competencies also someone who followed him. This is certainly in keeping with one of the objectives of the certification program management own risks, which produce human resources qualified and competent in the field of risk management and professional standards and codes of conduct are good to improve the quality of risk management and corporate governance of banking Indonesia (BSMR, 2006: 1). An important role of certification to improve the competence of

management and executive officers is also expressed by Sugiarto (2004: 8) that in order to minimize the risks faced by a bank, then the bank's management must have the skills and competencies sufficient to allow all sorts of risks that could potentially emerge can anticipated from the very beginning and look for ways to overcome them. Thus, in order to manage the risks faced by the bank, then the bank's management must be provided with sufficient expertise and competence so that in their daily duties risk managers are able to measure and minimize the risks arising from business activities bank.

The last urgency is to support the six pillars of the Indonesian Banking Architecture (API). Whether or not the pillars API between is influenced by success in managing the risks of the bank. Therefore, urgent certification program to be implemented since there are many management and executive officers who do not have sufficient competence related to the bank's risk management. With still many bank managers and officers who are not competent in dealing with risk, then the potential of occurrence of a high bank losses, special causes poor quality of lending. Of the six pillars of the above, it is a good risk management are especially needed in the realization of the first pillar, namely the structure of sound banking. Expressed by Sari (2012: 17) that the impact of the bank's risk management related to the first pillar of the structure of a healthy banking system, i.e. the healthier the soundness of a bank, the smaller the risk that must be managed by the bank, so that the smaller or better the application the bank's risk management.

Components of urgency also cover aspects of data mapping and potential organization. The spread data needs to be done before the program formulated for the purpose of obtaining data relevant average for consideration in making a decision. Mapping data can be done in several ways, among others, academic studies, ask for input and consideration of academics, and comparative studies. It is concerning with academic study. Academic studies need to be done to provide systematic instructions in order to take out a policy. Through scientific research, it will be concluded that a valid and reliable so as to avoid mistakes in decision making. The results of this study indicate that the risk management certification program has been based on the academic study. Thus, risk management certification program has met one of the elements or indicators mapping data. The study was conducted by Bank Indonesia as a formulator and owner risk management certification program.

With regard to soliciting input academia, the academics is the party that has the competence to give directions that are useful in the development or formulation of the program, mainly through theoretical inputs. In the formulation of risk management certification program also requires input from academics, so this needs to be done. The results of this study indicate that the formulation of risk management certification program has been based on the input of academics. Thus the risk management certification program has been preceded by the mapping of data, including through inputs from academicians.

As for the comparative study, is required in order to obtain information on whether a program is really effective and also get input on the development and design appropriate programs. The results

showed that the formulation of risk management certification program has been accompanied by a comparative study as part of the mapping data. The comparative study is among others, to the Netherlands. It shows that the implementation of risk management certification already meet one or indicator element or mapping data.

Another aspects of the urgency is the potential of the institution. Measuring is to analyze the potential agency is required to determine the readiness of the providers of risk management certification, so when it is implemented program to run smoothly. This step is to ensure that in the implementation of the program can work well as expected. There are several important indicators of the potential of the data, namely the readiness of human resources, facilities and infrastructure, budget and human resources support wise. The factors are fundamental factors so that a program can be done well. Human resources quality and quantity is needed for the smooth running of the organizers of the risk management certification program so that what the objectives of the program can be achieved. In this regard, the result that Bank Indonesia as the party who has the authority to take the policy making program, has tried to make an analysis of the potential of human resources. Facilities and infrastructure are important factors that must be provided for programs to run properly. In the absence of adequate infrastructure, the implementation of the program may not run optimally, so that the goal will not be achieved. The results of this study indicate that Bank Indonesia has conducted an analysis of the readiness of facilities and infrastructure prior to certification of risk management is done.

In addition to the need for support facilities, to conduct a program also needs adequate budgetary support. If budget support is weak, it is hard to run a good program, so that the target program cannot be full filed. This study indicate that the Bank of Indonesia as the owner and drafting program has performed an analysis of the readiness of the budget prior to the risk management certification program. Support is also needed the wisdom and becomes important that a program can run smoothly and have a strong legal umbrella. A strong legal basis to anticipate is its implementation does not appear in the matter of law and policy implementers easier to make decisions. The results of this study indicate that the risk management certification program has had a sufficient legal basis. Policy support is in the form of laws, regulations of Bank Indonesia and circulars issued by Bank Indonesia. Second, the design of risk management certification program. One of the criteria that a good program that has a clear design. The program is accompanied by clarity of design will facilitate the implementation because it is better planned and focus on what the objectives and program suggestions. The aspects are related to support programs such as the program's objectives, policies (policy), the next target, the orientation, the parties involved in the development program, the size of the success of the program, and the benefits of the program.

The first aspect is the goal program. Each program must be accompanied with a clear objective, so that all activities undertaken can be planned and organized. Associated with risk management certification program, the results showed that the risk management certification program already has clear objectives and is

also supported by the clarity of vision and mission. As we know that the main goal was scored in risk management certification of qualified human resources in the field of risk management that has professional standards and codes of conduct are good to improve the quality of Indonesian banking risk management and good corporate governance in order to compete in the global era.

The second aspect is the policy. The cornerstone of the policy to be crucial for the smooth and legality of the implementation of a program. Therefore, every program should have a legal basis or based on a strong policy to ensure that does not happen in the future legal problems. The evaluation results in this study showed that risk management certification program implemented currently has a policy cornerstone. That policy is written in the form of laws or regulations of Bank Indonesia.

The third aspect is forward. A program needs to be equipped with the next target-to-target location, so it will provide a focus in preparing plans and activities. One important aspect of the program objectives is clarity, so that it can be understood and realistic to achieve. The results of this study indicate that their target forward clear and anticipatory has accompanied the risk management certification program.

The fourth aspect is the orientation program. The orientation is also an important factor to be considered for a program, so that a good program must meet the clarity. The results of this study indicate that the risk management certification program has had a clear orientation. The orientation is mainly aimed at strengthening the national banking by building human resources quality banking.

Fifth aspects is the parties involved. A good program, the design also needs to involve parties deemed interested, so the program get a lot of input in order to run properly and provide more benefit. The results of this study indicate that the process of developing a risk management certification program already involves several parties are considered able to provide input and have an interest. The parties engaged by Bank Indonesia in the preparation of risk management certification program that is BI, GAP, BNSP, Banks Association, IBI, and Asbanda.

Sixth aspect is the size of the program's success. A good program, before it is implemented should be accompanied by measures of success. It is necessary to conduct an evaluation when the program was run, so that can know the success rate. The results of this study indicate that the risk management certification program has had a reference to see the success of the program, especially from the aspect of increasing the number and quality of graduates.

Seventh aspect is the benefits of the program. A program that is created must be taken into account how big benefits when compared with the costs. The results of this study indicate that the risk management certification program is judged to have many benefits, both general and specific, and good for bank officials, Bank Indonesia and participants of certification. All of them benefit from the risk management certification.

Evaluation Installation Phase

Evaluation focused on planning the installation phase of the program. Planning

on a program there should be progressed and finalized before the program is implemented. In a simple planning is defined as the process of setting goals and determine what should be done to solve it (Schermerhorn, 2010: 10). Planning is required before a program is implemented because it will give more direction in determining the steps that should be taken when implementing the program. The aspects related to the design implementation guidelines for the program include program, recruitment and selection, risk management certification curriculum, exam schedule program implementation, program instructors, program evaluation, the successful completion of the program, and monitoring.

First is create guidelines for the implementation of the program. A good program should have guidelines to implement them. The results of this study indicate that the risk management certification program has been accompanied by the implementation of the guidelines coordination. The guide of risk management certification program refers to Bank Indonesia Regulation and Guidelines Implementation of Risk Management Certification.

Second is the planning of recruitment and selection. Recruitment and selection of site planning is an important part of a program, so this problem should be well thought out. The results showed that there was already planning in the selection and recruitment of human resources for each institution the certification. Planning among other things contained in the guidebook coordination certification program as a reference for recruiting and selecting instructors and staff organizers.

Third, risk management certification curriculum planning. The curriculum plays an important role and should be cultivated with the best and well planned so that, when implemented according to the needs and well-targeted. The results of this study indicate that the organizers of the program already has a good planning associated with risk management certification curriculum will be applied. Curricula were adjusted according to practical needs on the ground for officials and administrators of the bank so that certification can actually provide benefits to participants.

Fourth, the exam schedule program execution. The implementation schedule exams and training also needs to be planned carefully so that implementation can proceed smoothly funds provide certainty, especially for participants who will follow. The results of this study indicate that the risk management certification program held by each operator already has a planned schedule. Both LSPP and BSMR had planned implementation schedule for one calendar year.

Fifth, the planning program instructor. Instructor becomes one of the fundamental factors for the success of the program, especially for risk management certification program. Therefore, these instructors problem should be really planned carefully, so that the implementation of the training will run effectively and efficiently. The results of this study revealed that the organizers of the program already has planning associated with the instructor. Planning is done both concerning the amount and instructor competence and qualifications needed to support the implementation of risk management certification program.

Sixth, program evaluation. Evaluation of the program also needs to be well

planned, so that the view will use the existing methods or approaches as to what program evaluation will be done later. The results of this study indicate that there is already planning an evaluation of each of the providers of certification. Planning evaluation is carried out both internally and externally. Externally, among others, performed by BNSP and ask for feedback from the participants of certification.

Seventh, the successful completion of the program. Planning graduation from the program should also be considered before the program is implemented. Parameters or indicators should be used to determine graduation should also be prepared in advance as well as the mechanism of repetition when it no pass. All that must be finalized before the program runs. The results of this study revealed that there is already associated with the planning of the graduation program participants. Graduation of referring to the cognitive and behavioral aspects. Cognitive criteria in the form of knowledge and skills, while effects can be seen from the behavior.

Eighth, the monitoring plan. Monitoring or commonly referred to as supervision is an important aspect to be planned before the program starts. Theoretically, monitoring or supervision see a variety of tasks that have been completed and to ensure that work is carried out in accordance with the expected manner (Certo, 2010: 5). In planning the monitoring, it needs to be prepared by the first method and the approach to be used for later implementation of the program can be run well. The results of this study revealed that the monitoring plan has been especially internally and from BNSP. While BI as the program owner no plans of monitoring to supervise the risk management certification program.

Evaluation Process stage

Evaluation phase of the process is focused on execution or implementation of the program. Implementation is a very crucial stage and determine the sequence of a program. Implementation of the certification program is the implementation of the plans that have been made previously. The aspects of program implementation is primarily concerns the training process, the curriculum implementation, training activities, the implementation of the evaluation system, the implementation of the monitoring system, and a limiting factor and supporters. First, the training process. Training process includes activities that take place during training, such as regarding punctuality, attitude and behavior of instructors, communication takes place in the classroom, and evaluation or feedback. This training process is greatly affect the effectiveness of teaching in the classroom, so it should be executed with caution. The results of this study indicate that the training process in general has been running well. The training process is already well under way, especially regarding the timely implementation of the training, the implementation of the model of learning, mastery of the material the instructor and also about infrastructure.

Second, the implementation of the curriculum. The implementation is concerning with the application in training on curriculum that has been developed previously. In this case we want to know whether the material taught in the training match or follow the curriculum that has been developed previously. Good

implementation would follow to the curriculum that already planned, so that the target competencies expected of participants can be achieved.

The results of this study indicate that the implementation of the curriculum in risk management certification training has been going well. Curriculum implementation concerns the implementation of the curriculum in accordance with the planning, the delivery of the curriculum in a systematic, carried out reform according to the development theory, and the balance between theory and practice.

Third, the training activities. Training activities related to such things as their answer forum discussed and resolve the real problems that developed in the work environment. The results showed that the activity of training in risk management certification process is going well. Activities that take place as a business trainer for using instructional media in order to facilitate exposure of the material, the interaction of participants with the instructor in the form of question and answer and discussion, and conduct case studies to solve the actual problems that developed in the banking world.

Fourth, the implementation of the evaluation system. Evaluation is needed on the implementation of risk management certification program, so that it can be seen how far the effect. Theoretically, the evaluation of the benefits or value set on a matter that is evaluated (project, program, or other entity that is evaluated), arguing that placing a value on something that should have been assessed on the basis of the two-dimensional (Vedung, 2009: 5). The objective according to Weiss (in Vedung, 2009: 10) that is to measure the impact of a program against the goals set to be implemented as a way to contribute to the decision making the next decision about the program and improve the program in the future.

The results of this study indicate that that during this time more evaluation is conducted internally by the providers to obtain feedback program improvement. While the external party is still minimal which is newly done by BNSP. While Bank Indonesia as the owner of the program is not an evaluation at all. This is very unfortunate, because Bank Indonesia will not know objectively the progress of implementation of risk management certification.

Fifth, the implementation of the monitoring system. Monitoring or monitoring of ongoing activities is also important to ensure all activities related to the implementation of the program running with plans that have been made. The owner or the formulator program should do monitoring. The results of this study revealed that has not is the monitoring activities conducted by Bank Indonesia as the owner of the program. As well as evaluation, monitoring is done internally, while externally new BNSP.

Sixth, the limiting factor and supporters. In the process of implementation of a program, it will not be released from the constraints factors and supporting factors. Obviously limiting factor will lead to the implementation of the program does not run well, while the supporting factors are factors that lead to the success of the program. The results of this study indicate that there are still a number of obstacles faced related to the implementation of risk management certification. The obstacles are the lack of supervision of the program owners institutions (Bank Indonesia), not all of

the banks involved, and certification schedules that are often concurrent with the bank working hours. The supporting factor is the adequacy of infrastructure or infrastructure, an adequate number of assessors, the support of the relevant parties, the availability of information technology systems, bank participation and support of Bank Indonesia.

Product Evaluation Phase

The results of the evaluation phase component product performance risk management certification program indicates that there are at least two important results that can be obtained from the implementation of risk management certification program, namely the increasing competence and a culture care risk (risk awareness culture) among management and bank officials. Both of these results are considered as an important pillar for the establishment of a healthy banking system. Related to the competence of the management and officials, its achievement among others, can be seen from the increase in the competence of officials and the management of banks, an increase in the percentage of the number of officials and officers who have a certificate of risk management.

Concerning with the improvement of the competence of officials and the management of banks, for the moment has become a liability that the management and officers who deal with the risk of having competence and expertise in risk management. Certification is one means to improve the competence and expertise. This is as described in Booklet Bank (2012: 103) that in implementing effective risk management and planned. The bank is required to fill the post of management and officers of the Bank with the human resources who have the competence and expertise in the field of risk management as evidenced by a certificate of risk management published by the Institute of Professional Certification. The results of this study revealed that there is an increase in the competence of officials and the management of banks associated with the implementation of risk management certification program. It was known from the already many managers and officers who have the certification, can minimize bad debts, and have an action that is more cautious in carrying out its duties. This indicates that there is a positive result of the implementation of risk management certification for the actions of participants of certification related to handling risk.

Furthermore, associated with an increased number of officials and officers who have a certificate of risk management, then this may be an indication of the achievements on the implementation of risk management certification. The results showed that the participants already have an increase risk management certification. Officers and bank officials who have been certified means has gained recognition of its competence in managing the risk level in that followed. Thus it is an indication has been an increase competence among government officials and bank officers.

The next size is the cultural achievements care risk (risk awareness culture). In 2005 NPLs as a whole is still quite high, namely 7.56% and gradually decreased until the last in 2012 amounted to 1.87%. It shows the positive impacts of risk management certification program enactment of the credit quality banks in general.

This can give you an idea that the application of risk management certification program does not appear to

provide a significant impact on banks' capital adequacy.

Conclusion

First, the evaluation phase is the urgency of the components of urgency demonstrated risk management certification program. It is the management and officers of commercial banks meet the exigencies which include: the urgent need is associated with coping with the increasing complexity of banking business at this time, the mapping as input and consideration in making decisions, the analysis of the potential institutions that used to determine the readiness of the providers of risk management certification. As for the design components indicate that the risk management certification program for management and officers of commercial banks have had a good design. They are shown by: the purpose of the program is clear, has a strong base policy, the program objectives are clear, have a clear orientation program, involving hand the related parties (stakeholders) in the formulation of the program, the size of the program's success, and has the benefit formula.

Second, the results of the evaluation gaps are installation phase risk management certification program for management and officers of commercial banks have had a plan that is good enough to be seen from the implementation guidelines for the program, planning recruitment and selection, curriculum planning, exam schedule program execution, planning instructor program and planning graduation program. It is just for the evaluation and monitoring.

Third, the results of the evaluation phase of the process in general gap shows the implementation of risk management certification program for the management and officers of commercial banks went well. It refers to several aspects: the timely implementation of the training, the quality and behavior of the instructors, curriculum implementation, and instructional model applied instructors, evaluation and monitoring by the BSMR, LSPP and BNSP. To obtain feedback program improvement and also from BNSP. Implementation of risk management certification program also encountered obstacles such as lack of supervision of Bank Indonesia, not all of the banks involved, and certification schedules that are often concurrent with the bank working hours. While supporting factor is the adequacy of facilities and infrastructure, the number of assessors, the support of the relevant parties, information systems technology, bank participation and support of Bank Indonesia.

Fourth, the evaluation phase of the product shows the implementation of risk management certification program provides some impact on increasing competence and a culture concerned about risk. There were improvement competence of officials and administrators in the management of risk is indicated by its ability to minimize bad debts, and have an action that is more cautious in carrying out its duties. Moreover, it also can be seen an increase in the number of officials and officers who have a certificate of risk management. Increased risk care culture among both management and bank officials risk managers and bank management, shown with the improvement observance of procedural orgnaizer and bank officials after the certification of risk management and the establishment of a special unit that is handling the bank's risk. It is just reward

and punishment has not run well for managers and officers in charge of risk. The impact of risk management certification program for the management and officers of commercial banks on bank performance is still limited, especially against non-performing loans (NPL) and ROA, while the bank's earnings and capital adequacy of banks has not been seen.

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Effect of Method of Survey, Question, Read, Recite, Metacognitive Skills Review of Results and Learning Materials Ecosystem High School Student

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ABSTRACT

This study aims to determine the effect of learning methods SQ3R against metacognitive awareness, metacognitive skills, and the results of class X student of SMAN 1 Kelara Jeneponto. This is a quasi-experimental study; two samples treated by different methods of learning and see its effect on awareness and metacognitive skills and student learning outcomes. The design was Posttest Only Control Group Design, with a sample size of 30 students to a class of 30 students for the control and experimental groups. Collecting data using MAI questionnaire to measure metacognitive awareness, a test description for measuring metacognitive skills (using a rubric) and cognitive learning outcomes of students. Data were analyzed by descriptive and inferential (t-test statistics with SPSS 17, 0 for Windows, performed with a significance level of 5%). The results showed that (1) There is no effect of learning methods SQ3R the metacognitive awareness of students, (2) There is an effect of learning methods SQ3R the metacognitive skills of students, (3) There is an effect of learning methods SQ3R on student learning outcomes.
Key words: Method SQ3R, Metacognitive Awareness, Metacognitive Skills, Learning Outcomes.

Introduction

Education is an important sector that should be handled by a nation, because in essence develop human education is a process to develop themselves, in order to face all the changes and problems that occur in the surrounding environment. Improving the quality of education is very large role in the development of a nation. Education is a basic business and planned to realize the learning, the learning atmosphere and the learning process, so that learners are actively developing their potential to have spiritual power of religion, self-control, personality, intelligence, character, and skills necessary for himself, society, nation and state. Therefore, man must be educated to make progress.

Be aware that the core activities of education lies in teaching and learning process. Through the improvement of teaching and learning process, is expected to improve learning outcomes and educational improvement will be seen in the results of students' competencies acquired. Good teaching and learning process requires students to be more active so that the learning process should reflect the two-way communication, not merely the provision of information in the direction of the teacher or conventional without developing mental students. The student is the center of learning and teaching, the students need to be used to solve problems, encourage students to think and understand the subject matter, not just hear and record what the teacher, so that the learning process, students can build their own what they have actively participated active during the learning process (MONE, 2003).

The results of observations conducted by researchers showed that the teaching and learning process in SMA Negeri 1

Kelara Jeneponto large part dominated by conventional methods of learning still, so that the student is passive. In addition, students still feel shy and lacked the courage to ask questions, answer questions or express opinions, as well as the students read the material taught is still low so the response of students in the learning process is still lacking. This resulted in lower student learning outcomes. Still the number of teachers or lecturers who consider the old paradigm as an alternative in the teaching and learning process. They teach the students simply expect Lounge, Silence, Listen, Record, and Memorized (3DCH). John Locke, who said that a child's mind as a blank white paper is clean and ready to wait graffiti-coteran teacher, derives the old paradigm from a tabula rasa theory. Though students have no prior, knowledge will be their basis for building further knowledge (Lie, A., 2010).

Through cooperative learning (cooperative learning) in teaching and learning, each learner an active role in the execution of duties by the involvement of other learners. Cooperative learning is one of the innovative learning model, where learning based on constructivism, which centered on the students and teachers act more as facilitators. Cooperative learning is developed to achieve three objectives, namely learning outcomes academic learning, acceptance of individual differences and social skills development. The learning method can be used for the purposes of the above is the learning method SQ3R. SQ3R method (Survey, Question, Read, Recite and Review) to make students more creative, because SQ3R method is practical. SQ3R methods in the learning ecosystem subject students to active engage with the guidance of teachers, so that the concept of existing on the subject can be understood, to improve students' metacognitive knowledge.

Metacognition is often defined as "thinking about thinking (Livingston, 2003). Metacognition consists of knowledge and skills of metacognition. Metacognition have an important role in regulating and controlling one's cognitive processes in learning and thinking, so that the learning process becomes more effective (Anderson, 2010). Recognizes the importance of learning methods and approaches to develop students' ability to think, it is necessary that the learning more actively involve students in the learning process itself. It may realize through an alternative form of learning that is designed such that it reflects the student's activity to create awareness and metacognitive skills.

Therefore, through learning methods SQ3R expected to increase awareness of metacognitive and metacognitive skills of students. This is because the method SQ3R, individually must read and understand the contents of the reading, find and highlight key words from the reading material, make a list of relevant questions based on keywords acquired from the reading material and then answer it yourself, then questions and answer generated individually discussed with friends the group by discussing and reviewing repeated. From the steps of the method SQ3R show their thinking process performed by the students. According to research conducted by Vault (2010), that an increase in metacognitive skills with methods of teaching biology students SQ3R in class VII.

Moving on from the experience that students quickly forget the material that has been given in the subject being presented teachers with the conventional

learning methods, the method SQ3R is expected that students can understand and remember the material in a longer period of time / permanent. Application of the method SQ3R in learning will be more attractive to improve the understanding of biological concepts and minimize the difficulties concepts of biology. Based on the above background, it is necessary to do research with the title "The Effect of Method Survey, Question, Read, Recite, Review of Metacognitive Ability and Learning Outcomes Content Ecosystem High School Students".

Research Methods

The research design used in this study is Posttest Only Control Group Design (Sugiono, 2010). The study involved two groups: one as an experimental group and a control group. Experimental group used SQ3R learning methods, whereas the control group using conventional learning. This research is a quasi-experimental research (quasy Experiment). The variables examined in this study consisted of independent variables and the dependent variable. The independent variable is the learning method SQ3R. The dependent variable was metacognitive awareness, metacognitive skills, and student learning outcomes.

The population in this study were all students of class X SMA Negeri 1 Kelara Kab. Jeneponto, the academic year 2011/2012 which consists of seven classes with 210 students. Selection of the samples in this study conducted in Cluster Random Sampling. Cluster Random Sampling is a sampling technique the group that has the same characteristics (homogeneous). Determination of the experimental group and the control group was done by random to obtain class X1 and X3 as an experimental group as a control group with the number of each of as many as 30 students.

Data collected through activities, namely; 1) Provide Inventory questionnaire metacognitive awareness and metacognitive skills section to the subject of research at the end of the meeting to determine the level of metacognitive after learning. 2) Posttest; posttest conducted on the final achievement test. The data were analyzed in two ways, namely statistical analysis descriptive and inferential statistical analysis. Descriptive statistical analysis, aims to describe the results obtained studying biology students in both the experimental group and the control. Descriptive analysis was also used to describe the profile of metacognitive students.

Results and Discussion

Description of Data Analysis Results

1. Description of Metacognitive Awareness Data, Metacognitive Skills and Learning Outcomes

a. Metacognitive awareness

Table 1. Number of Students with Metacognitive Awareness Score Earned At posttest

Score	Student Number				Category
	Control Group		Experimental Group		
	Posttest	%	Posttest	%	
0-20	–	–	–	–	Msb
21-40	–	–	–	–	Bbb
41-60	–	–	–	–	Mb

61-80	13	43,33	21	70	Bb
81-100	17	56,67	9	30	Bsb
Total	30	100	30	100	

In table 1 shows the percentage difference metacognitive awareness of the control group and the experimental group during the posttest. In the experimental group 30% of students obtained a score in the category is growing very well, whereas in the control group 56.67% of students obtained a score in the category of a. Metacognitive skills metacognitive awareness is growing very well. Furthermore, the experimental group 70% of students obtained a score of metacognitive awareness on good growing category, while in the control group 43.33% of students obtained a score of metacognitive awareness in developing good category.

Table 2 Number of Students Scoring Metacognitive Skills Learned At posttest

Score	Student Number				Category
	Control Group		Experimental Group		
	Posttest	%	Posttest	%	
0-20	_	_	_	_	Msb
21-40	_	_	_	_	Bbb
41-60	27	90	19	63,33	Mb
61-80	3	10	11	36,67	Bb
81-100	_	_	_	_	Bsb
Total	30	100	30	100	

Table 2 illustrates that the highest number of students at the time of obtaining posttest score in the category of metacognitive skills began to develop, which is about 90% of students in the control group and 63.33% of the students in the experimental group. 36.33% in the experimental group of students who are in *a. Student learning outcomes* good growing category, while in the control group, only three students or 10% were located in the well-developed category. In the experimental group or the control group did not exist at all students are able to achieve very good growing category of metacognitive skills.

Table 3 Number of Students Scoring Student Results Obtained At The posttest.

Score	Student Number				Category
	Control Group		Experimental Group		
	Posttest	%	Posttest	%	
30-39	_	_	_	_	G
40-55	_	_	_	_	K
56-65	8	26,67	3	10	C
66-79	17	56,67	15	50	B

80-100	5	16,66	12	40	BS
Total	30	100	30	100	

After noticing Table 3 illustrates that the number of students on the posttest, control group obtained a score of learning outcomes in enough categories 26.67%. While the experimental group score enough learning outcomes in the category of 10%. Furthermore, in the control group were 56.67% of students in both categories, and 50% of students are in the experimental group both categories. For both categories once in the control group amounted to 16.66% of students, while the experimental group by 40%.

Hypothesis testing

t. Effect Hypothesis Testing Learning Method SQ3R against Metacognitive Awareness.

Table 4 Summary of Test Results Prerequisites and test hypotheses Value posttest Metacognitive Awareness

No.	Component	Sig.
1	Normality Test (One-Sample Kolmogorov Smirnov Test)	.294
2	Homogeneity Test (Levene's Test of Equality of Error)	.209
3	t-test (Independent-Sample T Test)	.112

In the column One Sample Kolmogorov-Smirnov Test, it appears that the significance level is greater than sig. 0.05 is sig.294, because sig more than 5%, the data for the metacognitive awareness for the control group and the group SQ3R called normal distribution. For homogeneity test based on the analysis of the data metacognitive awareness indicate that the data has sig level. 0.209 or 20.9%, due to the significance level of more than 0.05 (5%) then the data is homogeneous. The data in Table 4 also shows that the popularity of t-test were performed acquired greater significance level of alpha 0.05 (p ⊠ 0.05) with sig. 0.112. This means that Ho is accepted H1 rejected. So there is no influence of the use of learning methods SQ3R the metacognitive awareness of students.

a. Effect Hypothesis testing methods Learning SQ3R against Metacognitive Skills

Table 5 Summary of Test Results Prerequisites and test hypotheses Value posttest Metacognitive Skills

No.	Component	Sig.
1	Normality test (One-Sample Kolmogorov Smirnov Test)	.806
2	homogeneity Test (Levene's Test of Equality of Error)	.674
3	t-test (Independent-Sample T Test)	.002

Table 5 also presents the t-test results obtained skill of metacognitive smaller than the significance level alpha of 0.05 (p 0.05) with sig. 0.002. This means that Ho is rejected H1 accepted. So, there are significant learning methods SQ3R the metacognitive skills of students. a. Effect Hypothesis Testing Against SQ3R Learning Method Learning Outcomes

Table 6 Summary of Test Results Prerequisites and test hypotheses posttest Values Student Results

No.	Component	Sig.
1	Normality Test (One-Sample Kolmogorov Smirnov Test)	.420
2	homogeneity Test (Levene's Test of Equality of Error)	.965
3	t-test (Independent-Sample T Test)	.011

In Table 6 presented the results of the t-test student learning outcomes which is smaller than the significance level of alpha 0.05 (p 0.05) with 0.011 sig. This means that Ho is rejected H1 accepted. Thus, the results of this test it can be concluded that there is influence learning method SQ3R on student learning outcomes.

Discussion

1. Effect of Metacognitive Awareness against Method SQ3R student of SMAN 1 Kelara Kab. Jeneponto

Based on the results of the study, metacognitive awareness in the control group were in a higher category than the experimental group. Wherein, the control group were in the categories developed very well, while the experimental group in the category well developed. This can be proven by the difference in scores of metacognitive awareness at the time of the posttest. Conclusion The above illustrates that the general method of learning SQ3R showed no effect on metacognitive awareness. This is presumably due to (a) lack of awareness of students in response metacognitive awareness inventory using MAI in understanding their learning strategies, such as plan, monitor, and regulate themselves. Weinstein & Mayer (1986) in Aderson & Krathwohl (2010) states that learning strategies such as repeating, elaborating and organizing can train students in test yourself and asking yourself questions. (b) The students are still confused or do not understand the meaning of the sentence statement of metacognitive awareness questionnaire using MAI, this has an impact on the determination of the answer choices are not appropriate and not appropriate to the circumstances students. (c) The students were impressed rush in to fill the questionnaire, filling questionnaires completed much faster than a predetermined time. Students seemed to only want to judge for itself as possible, with no thought of what actually happens in the process of learning. In fact, these statements require analysis to understand the meaning. Aderson & Krathwohl (2010) stated that it is far more important for students to have perceptions and

decisions about their own knowledge and expertise rather than have the self-knowledge that false and inaccurate.

Stages SQ3R method associated with the components of metacognitive awareness, in which students engage more actively in all aspects of learning activities and an evaluation of what they have earned. As a means of social groups in the process of interactive learning, and encourages the involvement of students to exercise maximum metacognitive skills and build their knowledge. Wilson (1999) in the Danial (2010) defines the metacognitive as a person's consciousness about thinking, and evaluate and manage the process of thinking.

The results of this research was supported by the results of research Susanna (2011) also showed that metacognitive learning model has no effect on metacognitive awareness as well as the influence of the learning model metacognitive skills. Based on the results of this study concluded that the measurement of students' metacognitive awareness as measured using a questionnaire metacognitive Awareness Inventory (MAI) cannot record properly metacognitive awareness of students. This is in line with that proposed by Cerobima (2011) states that the use of questionnaires MAI to measure awareness of metacognitive students consisting of 52 items, on the basis of studies by more than 70 times (in elementary, junior high, high school and college) proved that the instrument MAI no / less suitable for use in a population of Indonesia, although internationally is already generally known.

2. Effect of Learning Method SQ3R Metacognitive Skills Students against SMAN 1 Kelara Kab. Jeneponto

Data from a study of metacognitive skills acquired, suggests that although students' metacognitive appearance between the control group and the experimental group were in the same category is the category growing well, but had an average score of metacognitive skills for the experimental group was higher than the control group.

The existence of significant influence metacognitive skills are taught with methods SQ3R than students taught by learning are used by teachers in school SMAN 1 Kelara which are conventional and do not get out of syntax learning methods SQ3R which include: Phase Survey, Question, Read, Recite, and review is written on the ability of students working on measures in accordance with the instructions provided LKS SQ3R.

Stage by stage of syntax SQ3R method requires the ability to think. Mu'minin (2007) explains that SQ3R method is a method of learning that guides students to read actively, critically and creatively and to understand and appreciate the teaching materials, and remember it longer. In the process of reading material SQ3R method, besides the students are actively understand short stories, creative also predict the content in accordance with the reading experience, and critical comment on what was intended in the content of these materials. This kind of learning in addition to improving students' imagination, creativity and power also increases the critical students in reading comprehension. So it is reasonable to believe that the method has great potential SQ3R empower metacognitive skills.

Methods SQ3R conjunction with metacognitive skills of students, clearly visible from the metacognitive skills empowerment efforts intentionally done

through the implementation stages SQ3R method into stages of learning that focuses on student (Student centered). Metacognitive skills needed for students to understand how to fulfill their tasks. Metacognitive strategy training included students in the learning SQ3R demonstrated through worksheets, when students complete every stage SQ3R method showed that the students had to use higher order thinking would indirectly reveal metacognitive abilities of students.

3. Effect of Learning Method Learning Outcomes SQ3R against SMAN 1 Kelara

Based on the results of research on student learning outcomes illustrate that after the learning process in the control group had an average score of 71.00 in both categories, while the experimental group had an average score of 76.08 learning outcomes that are in both categories. While they are in the same category but learning methods SQ3R higher than conventional learning.

The results of the above assessment in relation to students' mastery learning, then by category minimal mastery learning assessment with KKM 67, showed that the assessment of each individual to the control group and the experimental group still showed students who do not achieve minimum mastery learning. The control group showed about 8 students who do not reach the minimum completeness or 26.67%. For the experimental group, only 3 students who do not achieve mastery learning a minimum or 10%.

Mastery learning acquired students are not separated well from learning the syntax SQ3R namely; examine teaching materials with ideas for the subject matter (Survey), making the question of the keywords that exist on the stage of the survey (Question), read and then answer the question (Read), write back (Recite), and review (Review), where this method efficient use for learning because students can repeatedly study the teaching materials. Peirce (2004) in Miranda (2010) suggested that metacognition involves planning on the goal, self-watching, and self-evaluation during the process of thinking and writing his own about what people think. Furthermore, it was revealed when students monitor their learning, then students become aware of the problems potential in learning.

SQ3R learning methods used by students, namely reading manuscript material, find keywords, write in the form of a question with their own words of what is learned in the students' books and worksheets, the learning method of studying. Thus, students can be encouraged its comprehension, the results of this study, in line with the results of research elaborate by Degeng (1989) in Miranda (2010) that the task of making a summary of the material being read showed an increase in gains on student learning outcomes. Students can think about their thinking processes (Livingston, 2003). The implication of this study can increase student metacognitive skills useful for students studying biology that increases learning results.

Conclusion

Based on the formulation of the problem, hypothesis passage and the research results, it could be concluded as follows.

1. Teaching Method SQ3R no effect on students' metacognitive awareness of SMAN 1 Kelara. This is illustrated by the absence of a significant difference between awareness metacognitive

students taught by SQ3R learning methods and the students taught by conventional teaching methods (teaching methods used by teachers).

2. Learning Method SQ3R affect the metacognitive skills of students of SMAN 1 Kelara. This is evident from the existence of a significant difference between metacognitive skills of students in the control group with metacognitive skills of students in the experimental class.
3. Teaching methods SQ3R effect on student learning outcomes SMAN 1 Kelara. It is visible from a significant difference between the learning outcomes of students in the control group and the experimental group learning outcomes.

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Mathematic Science and Education:

The Mediating Effect of Organizational Commitment on Leadership Type and Job Performance

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ABSTRACT

Therefore, how to lead employees in Department of Transportation Province DKI Jakarta, Indonesia to improve their job performance becomes an important issue for an organization. A leader's leadership style will affect not only organizational objectives and organizational commitment but also organizational performance. The study used the survey data from employees of a Department of Transportation subsidiary in Jakarta, Indonesia to explore the impact of leadership style on the relationship of organizational commitment and job performance. The study sent out 119 questionnaires to collect data from employees of the Department of Transportation subsidiary in Jakarta, Indonesia. The effective response rate is 26%. The results show (a) leadership type will positively and significantly affect organizational commitment, (b) organizational commitment will positively and significantly affect job performance, (c) leadership type will positively and significantly affect job performance, and (d) organizational commitment has a partial mediating effect on the relationship between leadership type and job performance.

Keywords: Leadership type, Organizational commitment, Job performance, mediating effect.

Introduction

Leadership style is especially important to motivate employees' commitment to fulfill organizational objectives and increase job performance in the host nation (Riaz, Akram, & Ijaz, 2011; Chi, Lan, & Dorjgotov, 2012). Peter F. Drucker stressed that human resource is the most important asset to an organization (Liu, 2006), so it has to increase employees' commitment to improve their work outcomes. When members hold identification and share sense of belonging in an organization, they will consider themselves affiliated to the organization and will work hard with other members to achieve organizational objectives (Chiang, 2008). A higher organizational commitment will promote employees' willingness to work hard for an organization (Angle & Perry, 1981). Organizational commitment can improve employees' performance and raise organizational overall competitiveness. The purposes of the study are to examine (a) whether leadership style will positively and significantly affect organizational commitment, (b) whether organizational commitment will positively and significantly affect job performance, (c) whether leadership style will positively and significantly affect job performance and (d) whether organizational commitment will mediate the relationship between leadership style and job performance.

Literature Review

Leadership Style

Leadership can influence an individual or a group's behavior to achieve organizational objectives and job

performances (Hersey & Blanchard, 1974; Hsu, 2001). A suitable leadership can make organizational members step forward in the right direction to accomplish organizational goals, e.g., a good leader can guide or identify job direction for organizational members to follow (Hsien, 1985; Robbins, 2001). DuBrin (2004) believed that leadership can motivate organizational members to complete organizational objectives with confidence. Leadership style will affect the relationship between superior and subordinate and has a significant relationship with workers' motivation, attitudes, and job performance (Dale & Fox, 2008). In the past, the major leadership researches stayed on the discussions of trait theory, contingency theory, and behavioral theory. It was until Bass proposed transformational leadership and transactional leadership in 1985, the researches of leadership style become extensively noticed. Bass (1985) defined that transformational leadership as leaders hold charisma characteristics that will give followers' intellectual stimulation and individualized consideration. Bass and Avolio (1993) further indicated a transformational leader can inspire his or her followers to surpass the original performance expectations by enforcing, communicating and leading them to carry out organizational objectives spontaneously. Transformational leaders can understand needs, present organizational visions, enact regulations and delegate substantially to their followers (Chi, Yeh & Yu, 2008), and they know how to create an effective and meaningful workplace for creativity and development (Chi, et al., 2012).

Transformational leadership includes four components: inspiration motivation, intellectual stimulation, individualized consideration and idealized influence (Bass, Avolio, Jung, & Berson, 2003). On the other hand, a transactional leader understands what followers need and will give reward commitments, so they will work hard to achieve organizational goals in exchange for their benefits (Bass, 1985). Transactional leadership is a process of an exchange of benefits and a requirement orientation (Howell & Hall-Merenda, 1999). Transactional leaders will encourage followers to achieve predictable performance by helping them to familiarize with job responsibilities, recognize goals and build up confidence in the desired performance (Riaz, et al., 2011). Transactional leadership processes two factors: contingent reward and management by exception (Bass, 1985). The distinction between transformational leadership and transactional leadership is definite but not mutually exclusive (Bass, 1985). Therefore, the study considers that effective leaders should apply both leadership transactional leadership and transformation leadership to motivate individual members to achieve organizational goals. The study will use overall leadership style to examine its effect on organizational commitment and job performance.

Organizational Commitment

Buchanan (1974) asserted that organizational commitment is a kind of belief that connects feelings of organizational values and objectives with individual values and objectives. Organizational commitment is an individual expression of loyalty and devotion to an organization (Kanter, 1968). Organizational commitment is "the relative strength of an individual's identification with and involvement in a particular organization" (Steers, 1977, p.

46) and represents a high level of affection, loyalty and concentration on a job role in an organization (Dee, Henkin, & Singleton, 2006). Organizational commitment indicates that individual goal is similar or identical with organizational goals and can stimulate employees' productivity and loyalty (Chen & Aryee, 2007). Chen and Hong (2005) commented that if members in an organization trust and accept the organizational value, they are more willing to work hard to achieve organizational goal and have more organizational commitment. High organizational commitment will be beneficial for an organization because it signals that employees have high organizational identification (Jiang & Huang, 2002). Mowday, Porter, and Steers (1982) also identified that highly committed employees perform better than less committed ones. Buchanan (1974) indicated that at least five factors consist of organizational commitment, that is, a strong intention to maintain membership within the organization, an acceptance of the organizational major goals and values, a positive evaluation within the organization, an intention to work toward organizational goals, and a willingness to exert considerable effort on behalf of the organization. Porter, Lyman, Steers, Mowday and Boulian (1974) considered that organizational commitment includes three elements (a) the belief of organizational goal and value acceptance, (b) the willingness to pursue the organizational benefit, and (c) the intensive desire of organizational position maintenance. Allen and Meyer (1990) and Meyer and Allen (1991) further pinpointed that organizational commitment can be classified into three components: a desire (affective commitment), a need (continuance commitment), and an obligation (normative commitment) to maintain in the organization. These components are useful to examine the effects of employee retention, on-the-job behaviors, citizenship, job satisfaction and job performance (Meyer & Allen, 1991; Somers, 1995). Thus, organizational commitment can be a beneficial factor to employees' behavior and work outcomes and a turnover rate reducer for individuals in an organization (Rose, Kumar, & Pak, 2009).

Job Performance

Job performance is kind of outcomes after a job is finished. It represents the levels of achievement of each job (Byars & Rue, 2000) and the fulfillment of organizational regulations, expectations, or requirements for an official role (Campbell, 1990). It is the contribution to organizational goals and can be measured by outcomes (Borman & Motowidlo, 1993). Moreover, job performance is productivity that expresses the quantity, quality and contribution of a job. When productivity is high the overall performance within the organization will be high (Su, 1999; Schermerhorn, 2000; Sun, 2001). That is, job performance is an employee's overall work outcomes, including efficacy, efficiency, and effectiveness (Tsao, Huang, Huang, Chang, & Wang, 1997; Hsu, 2005). Schermerhorn (1992) argued that job performance is the results of quality and quantity after completion of a mission by an individual or a group. Blumberg and Pringle (1982) proposed that willing to perform, capacity to perform and opportunity to perform are three factors to influence job performance. Korman (1977)

also pointed that job ability and skill, motivation, and role perception are three determinants to affect individual job performance. Additionally, Hsu (2000) mentioned that the performance evaluation can be used to build incentives standards to make organizational members understand their contributions and the direction to their efforts. The evaluations of job performance are to (a) indicate the necessities of training and development, (b) assess the effects of employees' development and recruitment plan and enact incentive standards, (c) assist personnel decisions such as transfer, promotion, or layoff, and (d) provide feedbacks for employees in order for them to understand how performances are evaluated (Robbins, 2001). In the past, many studies on job performance used Katz and Kahn's (1996) organizational role theory to divide job performance into in-role behavior and extra-role behavior. In-role behavior denotes that behaviors accord with organizational or official regulations and can be an evaluation basis of job performance while extra-role behaviors specify that a behavior is not required by organizational or official regulations, and it is positive and discretionary (Linn & LePine, 1998). Borman and Motowidlo (1993) distinguished job performance into task performance and contextual performance. Task performance is the efficiency of individual work that indicates the degrees of completion of assignments under organizational expectations. It is the proficiency of an official job that contributes to the technological core of an organization (Borman & Motowidlo, 1993; Borman & Motowidlo, 1997). Motowidlo and Van Scotter (1994) further defined that task performance is individual work outcomes that are related to the organizational expectations or the degrees of achievement on a job assignment. It is a kind of in-role behavior, which will directly influence an organization's performance. Contextual performance means that individuals have the willingness to perform organizational activities, which are unofficially regulative and the earnest to persist in the accomplishment of organizational assignments as well as cooperate and keep good relationship with coworkers to achieve better performance (Borman & Motowidlo, 1993). Contextual performance signifies that employees will help organizational operations by free will without any internal system to regulate or control. This kind of performance can intensify an organization's or a group's efficacy and further affect job performance (Waldman, 1994; Moorman & Blakely, 1993; Organ, 1988). Organizational commitment will be positively related to both task performance and contextual performance (Muse & Stamper, 2007; Chi, et al., 2008; Joo & Park, 2010).

Leadership Style, Organizational Commitment and Job Performance

Leaders will influence organizational commitment and job performance because they can lead employees toward the achievement of job objectives. Leaders can guide individuals or groups to finish the goals and develop organizational commitment within employees (Bass, 1981; Reyes, 1990). Hence, leadership style is one of the critical factors that will influence organizational commitment (Yiing, Zaman, & Ahmad, 2009). By using the care and training of developmentally disabled persons as research subjects, Morris & Sherman (1981) found leaders' consideration tends to be related to high level of organizational commitment. Pillai,

Schriesheim and Williams (1999) found that transactional leadership has a significant and positive relationship with organizational commitment. Su (2001) commented that transformation leadership has a positive relation with organizational commitment on his study of expatriates in an organization. Yukl (2002) identified that transformation leadership can change the mindset of organizational members to commit organizational missions and objectives. Transformational leadership will significantly and positively affect organizational commitment (Chi, Yeh, & Chiou, 2008; Chi, et al., 2007). Lee (2010) asserted that transformational leadership and transactional leadership both have a positive and significant effect on organizational commitment. Moreover, organizational commitment will significantly and positively affect to job performance (Luthans, McCaul & Dodd, 1985; Chi, et al., 2007; Chi, et al., 2008). Leadership style has a positive influence on job performance (Lee, 2009; Pan, 2006). Transformational leadership will significantly and positively affect job performance (Chi, et al., 2007; Chi, et al., 2008; Pradeep & Prabhu, 2011). Wang (2006) observed that leadership style and organizational commitment have positive and significant effects on job performance. Chen (2004) concluded that the organizational commitment will mediate the relationship between transformational leadership behaviors and job performance in supportive and bureaucratic culture. Yiing, et al. (2009) suggested that leadership style would affect organizational commitment and, in turns, organizational commitment will influence job performance and mediate the relationship between leadership style and job performance.

Research Method

Research Framework

According to motivations, objectives and literature reviews on above, the study used leadership style as the independent variable, job performance as the dependent variable and organizational commitment as the mediating variable to explore the impact of leadership style on the relationship with organizational commitment and job performance (See Figure 1).

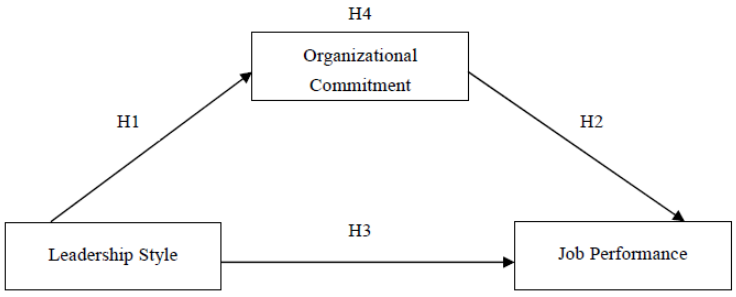

Figure 1. Research Framework

Research Hypotheses

The study proposed that research hypotheses as follows:

H1: Leadership style will positively and significantly affect organizational commitment.

H2: Organizational commitment will positively and significantly affect job performance.

H3: Leadership style will positively affect and significantly job performance.
H4: Organizational commitment will mediate the relationship between leadership style and job performance.

Research Design and Sample

The questionnaire included four measurement dimensions, leadership style, organizational commitment, job performance with 5-point Likert scale questions (1 = strongly disagree/ 5= strongly agree). All measurement designs were adapted according to the relative literatures. The study used convenience sampling to collect data from employees of a Department of Transportation subsidiary in Jakarta, Indonesia and applied SPSS17.0 to perform data analysis. 119 questionnaires were dispatched in total. The effective response rate is 26%.

Research Result

Sample Characteristics

The major sample characteristics are described as follows: 63 (53.3%) are male and 37 (46.7%) are female. Age below 30, between 30 and 40, between 41 and 50, and above 51 are 46.2%, 32.4%, 13.3% and 8.1%, respectively. Year of service between 2 and 3 years, between 4 and 5 years, between 6 and 7 years, and above 8 years disperse as follows: 28.6%, 31.0%, 15.7%, and 28.8%. Samples collected from processing and manufacturing department, warehouse management and delivery department, marketing and sales department, and human resource and management support department are distributed as follows: 51.1%, 22.9%, 13.8%, and 12.4%. 61.0% complete high school education, 26.2 % graduate from junior college and 12.9% are university educated.

Reliability Analysis

The reliability analysis applied Cronbach's alpha to evaluate internal consistency of the questionnaire. The results of Cronbach's alpha are 0.530, 0.766, and 0.669 with respect to leadership style, organizational commitment, and job performance. According to Wortzel's (1979) suggestions, it is acceptable when Cronbach's α is higher than 0.5. Consequently, the questionnaire of the study has a high internal consistency since Cronbach's alpha of each dimension is over 0.5.

Correlation Analysis

The study accepted Person's correlation coefficient to examine the relationship between each dimension. The results show leadership style is positively related to organizational commitment ($r=0.249$, $p<.001$) and job performance ($r=0.340$, $p<.001$). Meanwhile, organizational commitment is positively related to job performance ($r=0.484$, $p<.001$).

Regression Analysis

As shown in Table 1, leadership style is positively and significantly affected to organizational commitment ($\beta=0.249$, $p<0.001$), organizational commitment is positively and significantly affected to job performance ($\beta=0.484$, $p<0.001$) and leadership style is positively and significantly affected to job performance ($\beta=0.340$, $p<0.001$). The results show that H1, H2, and H3 are supported. In addition, the study followed Baron and Kenny's (1986) suggestion to verify whether organizational commitment will mediate the relationship between leadership style and job performance. First, leadership style has a positive and significant effect on organizational commitment ($\beta=0.249$, $p=0.000<0.001$). Second, leadership style is positively and

significantly affected to job performance (β=0.484, p=0.000<0.001). Third, both leadership style and organizational commitment are positively and significantly accounted for job performance (β=0.234; β=0.426, p=0.000<0.001), when leadership style is controlled. After implementing the above analysis, the study found that the strength of the relationship between the independent variable (leadership style), and the dependent variable (job performance) reduced from 0.340 to 0.234 when the study added the mediating variable (organizational commitment). Thus, H4 is supported which signifies that there exists a partial mediating effect and the amount of indirect effect is 0.12.

Conclusion

The study concludes the results as follows: (a) Leadership style is positively and significantly affected to organizational commitment. It implies if supervisors consider, motivate, assist to solve problems, and fight welfare for their subordinates, it can create positive organizational commitment and further promote job performance. Besides, supervisors can always increase organizational commitment by providing rewards to induce employees to work hard; (b) organizational commitment has a positive effect on job performance. It reveals that employees are willing to stay and devote themselves to accomplishing job objectives because they have the same values and goals within the organization; (c) Leadership style is positively and significantly affected to job performance. It means that supervisors' considerations or motivations can result in employees' positive feeling so their job performance will arise; (d) organizational commitment holds a partial mediating effect between the relationship of leadership style and job performance. It signalizes that supervisors have to notice the connection and influence of organizational commitment to employees. As employees have organizational commitment, their productivity will increase and so is job performance. Meanwhile, supervisors should give appropriate rewards to subordinates when they achieve job objectives. If supervisors cannot realize their promise, it will engender subordinates' negative feelings and cause them unwilling to exert efforts to their work. So, job performance will be decreased. The study suggests that (a) when an organization hires management level employees, it should consider selecting candidates with better leadership traits so that they will care and motivate subordinates to increase organizational commitment and job performance, (b) an organization can provide training programs to cultivate leadership talents of its employees. Especially, these programs can be designed in accord with subordinates' personality in order to create a more effective leaders, (c) supervisors need to communicate organizational values and job objectives with subordinates so that they can yield motivations to have better job performance, and (d) leaders should adjust leadership style depending on different employees and give proper organizational commitment to subordinates for them to complete job objectives effectively.

Table 1. The regression of leadership style and organizational commitment to job performance

	Model 1	Model 2		Model 3
	Organizational Commitment	Job Performance		Job Performance
Leadership Style	0.249*** (0.000)	0.340*** (0.000)	---	0.234*** (0.000)
Organizational Commitment	---	---	0.484*** (0.000)	0.426*** (0.000)
R^2	0.062	0.115	0.235	0.286
Adj. R^2	0.060	0.113	0.233	0.282
F-value	27.565	54.540	128.056	83.422

*Note: *p<0.05, **p<0.01, ***p<0.001*

Reference

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Based on The Tendency of procedural Knowledge

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ABSTRACT

The paper focuses on exploring grade 8 student pseudo-constructions based on the tendency procedural knowledge. The paper found that pseudo-construction when students complete the addition operation in fractional algebraic form occurs when students gave the correct answer with the correct resolution procedures, but students are not able to provide justifying the procedures used. The next it namely right pseudo-construction. On the other hand, students gives the wrong answer to the wrong resolution procedures, as students are encouraged to answer quickly. Also, the condition when the student gives the wrong answer because of careless errors with the correct resolution procedures, and students are able to justify the procedures used. The two conditions namely wrong pseudo-construction.

Keywords: pseudo-construction, procedural knowledge, fractional algebraic form

Introduction

Occurred construct mathematical concepts and problem solving in mathematics learning process of students. Such construction can succeed or fail. Construction of concept is successful if the construction process is correct and understanding of the concept is good, and otherwise. While the construction of problem solving is successful if it is found the correct answer with the correct solutions. Furthermore, the construction of problem solving is said to be a failure if, produces the wrong answer to the wrong solving process, produces the right answer to the wrong solving process, and produces the wrong answer when it actually was able to find the correct solutions. Construction failed to indicate a student's difficulties in constructing mathematical concepts and solve problems. The difficulty is often reflected in the form of an error made by the students. The error may be a result of the construction process is not visible from the output of a real mental activity (Leron, 2005; Lithner, 2000; Pape, 2004; Subanji & Nusantara, 2013; Vinner, 1997). Such conditions will be referred to as pseudo-construction in this study.

Pseudo- construction had been studied by many researchers using different terms. Subanji (2007, 2011) uses the term thinking pseudo in kovariasional reasoning, Vinner (1997) use the term pseudo-analytic and pseudo-conceptual, Lithner (2000) uses the term established experience (EE) versus plausible Reasoning (PR) in the context of problem solving non routine, Leron (2005) examine Dual process Theory of Kahneman (process system 1 versus the system 2) in the context of problems solving of algebra, and Pape (2004) uses the term direct Translation Approach (DTA) versus Meaning Based Approach (MBA) in the context of solving about word problem.

Sources of error in constructing concepts and solve math problems is happening math errors in this activity (Barrera, et al., 2004; Dhlamini, 2014; Elbrink, 2007; Ganesan & Dindyal, 2014;

Godden et al., 2013; Huang and Cheng, 2010; Idris & Narayanan, 2011; Kiat, 2005; Maat, et al., 2010; Riccomini, 2005; Zinc, 2010; White, 2010; Yusof & Malone, 2002). Math errors based on the solving process classified by the type of problem that is, the problem of calculation and word-problem.

The error mathematics in calculation problems had been studied by many researchers. Fong and Ho-Kheong (1993) classifies the causes of math errors into four categories, namely language, operational (external and internal), mathematical themes, and psychology. Yusof and Malone (2002) found a mathematical error type on fractions include, grouping error, basic fact error, defective algorithm, incorrect operation and careless error. Kiat (2005) classifies errors into three categories, namely conceptual errors, procedural errors and technical errors. Elbrink (2007) found that students' math errors on secondary education includes, calculation errors, procedural errors, and errors symbolic. Godden, et al. (2013) found the mathematical error in the form of an error due to sloppy research (technical), procedural, computation, and applications.

Furthermore, in solving word-problem, White (2010) examines the students' mathematical error by error analysis of Newman. The error analysis consists of: reading error, comprehension error, transformation error, process error, and the encoding error.

Based on research related to math errors above, we conclude that the type of math errors that can lead to students experiencing difficulties in constructing and mathematics problem solving are grouped into nine categories. These categories include, comprehension error, concept error, procedure error, basic fact error, principle error, calculation error, application error, Careless error, recalling error, and relating error. In this study, the type of error that will be used in assessing the occurrence of pseudo-construction when students construct concepts and solve math problems.

The construction process of mathematical concepts cannot be separated from the previous knowledge and experience of the students. This is in line with the opinion of De Lima and Tall (2008), McGowan and Tall (2010), and Tall (2002, 2004), that in constructing new knowledge, prior knowledge and experience is called Tall as met-before, can give effect positive and negative. The negative effects met-before can cause serious conflicts. It is intended that the met-before it can trigger errors in constructing concepts and solve math problems. Therefore, in this study one aspect that will be studied to determine the source of the pseudo construction in constructing concepts and solve math problems are met-before students.

Difficulty in constructing a concept would lead to difficulties in constructing other mathematical concepts. This is because the mathematical concept that one has associated with other mathematical concepts. As a result, it causes a lack of understanding of students on mathematical objects, and ultimately lead to students experiencing difficulty in solving mathematical problems.

It is in line with the opinion of Matt, et al. (2010) that the students' mistakes in solving a quadratic equation because they are weak in mastering topics such as algebra, fractions, negative numbers, and the expansion of algebra. For example, when students make mistakes in

completing the form algebraic operations with summing or subtracting algebraic parts that are not similar, then the student will make the same mistakes when solving quadratic equations. That is because the quadratic equation contains the algebra consisting of tribes algebra operations.

This study examines the operations of addition studies algebraic form then the error in constructing a mathematical problem solving based on the tendency of procedural knowledge. Sahdra & Thagard (2003) said "procedural knowledge is how about thinking", although many teachers assess student results performance by just looking at procedural knowledge but are actually a step by step of the student is the result of students' skills and thinking. Although only a procedural nature but students need to understand the process step by step from the activities done. Correspondingly Willingham, Nissen & Bullemer (1989) says that "the procedural knowledge is knowledge explains how to perform actions within the framework of clear procedures".

Related to the above statement, students' mistakes in constructing and solve mathematical problems need to repaired. The first step is to know characteristics of pseudo-construction of solving mathematical problems based on the tendency of procedural knowledge.

Research Methods

This study is descriptive research. It is intended for the study describe the characteristics and the occurrence of pseudo-construction based on the tendency of procedural knowledge. The approach used is qualitative approach, because this study examines the process or behavior of students in solving mathematical problems.

This study was conducted on eighth grade of students at the Junior High School 1Tinambung, Polman district, and province of West Sulawesi in the second semester 2015/2016. The results of the work of students in solving problems divided into two groups based on the students' answers. it is a group of right answers and wrong answers. Students who will be used in this study were students from each of these groups are in a state of pseudo-construction (pseudo-right and pseudo-wrong). The students said to be in the condition of pseudo-right if the student answers correctly in completing the assignment sheet, but are not able to provide justification the procedure used. Students are said to be in a state of pseudo any construction if the student answers incorrectly in completing the assignment sheet, but in fact students are able to solve problems correctly and is able to provide justification for the procedure used after researchers led disequilibration in him.

The technique of data collection used is Think aloud and interviews. Think aloud intended to process data that includes the pseudo construction, the data written, verbal, and behavior (expression).While the interview was intended to confirm if there are things that are not clear during data collection by think aloud.

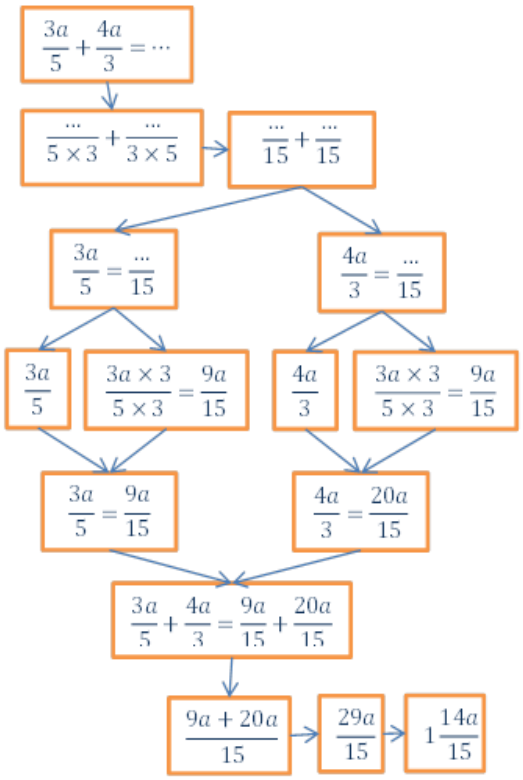
The process of data analysis in this study conducted by the steps as follows: (1) transcribe verbal data and behavior data (expression) collected, (2) analyze all data available from various sources, namely from the data written, verbal data (results think out loud, and interviews (if any)), and behavior data(expression) students, (3) reduction data by making abstractions. Abstraction is an attempt to make a summary of the core, process, and statements that need to be maintained to

remain in it, (4) arrange in the form of units which further categorized by making the coding, (5) describe the thinking structure of students in solving the problem.

Result of Study and Discussion

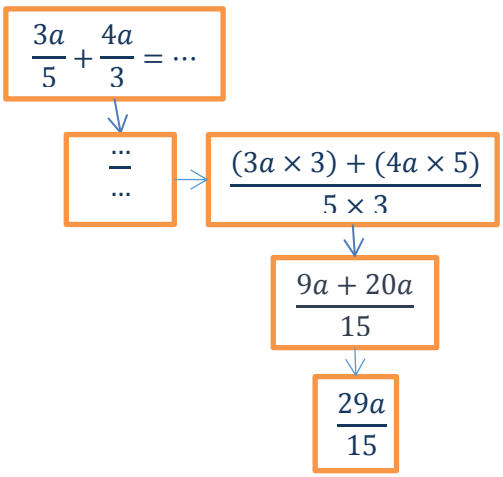
Find the solution of algebraic form $\frac{3a}{5} + \frac{4a}{3}$.

Problem Structure



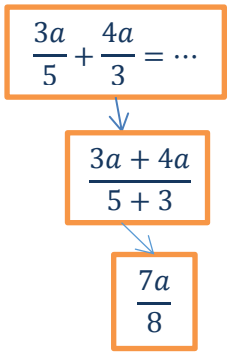
Right pseudo-construction (RPc)

Following the structure of thinking one subject that is undergoing true pseudo-construction when solve task instrument above.



The think Structure above states that students solve problems adding operation algebraic form by using the correct procedure that is, by multiplying each denominator fractions are added together to determine the denominator, and determining the numerator by summing the multiplication result of a cross between the numerator and denominator of the fragments.

Further stated that students acquire the right answer but cannot provide justification for the procedure used (Subanji, 2007, 2011; Vinner, 1997). For example, when a student asked why multiplying each fraction denominator to be operated ie, numbers 5 and 3, the student replied "because my recollection like that the way if you want to add fractions". Thus continues the students' answers when asked to justify the procedures used to resolve the matter.



Once the researchers conducted in-depth interviews on the subject, researchers learned that the subject spontaneously answering the questions above ie summing the numerator by the numerator and the denominator by the denominator. It because she is remembering the rules of fractional multiplication. This means that the subject doing recalling error (Fong & Ho-Kheong, 1993). Results obtained are (3a + 4a) / (5 + 3) = 7a / 8, this answer is the wrong answer. However, after reflection on the answer, the subject was able to find the correct answer. This condition is in accordance with a pseudo Analytic by Vinner (1997). Subject solve problems by using the procedure solving correctly, and capable of providing justification for the procedure used. This is in line with the behavior analytic by Vinner (1997).

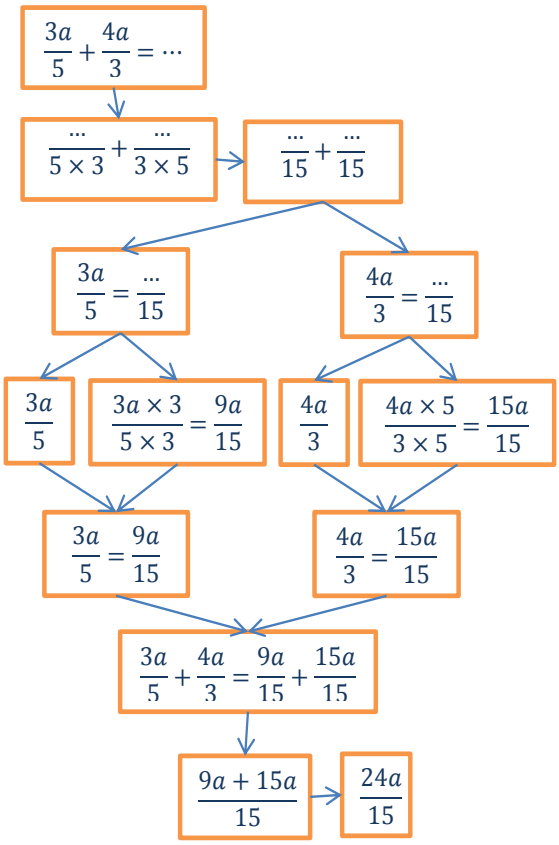
Having studied more in depth interview, it turns out students are not using the knowledge that students gain before such, the sum rule fractional algebraic form in which the numerator can be added when the denominator of each fraction to be operated are same, the concept of fractions are namesake and worth, the concept of the algebra and operations. Students tend to memorize the procedures and work based on previous experience when completing the addition operation fractional of numerical form.

Wrong Pseudo-construction Type 1 (WPc1)

Following the structure of thinking one subject that is undergoing wrong pseudo-construction of type 1 when solve task instrument above.

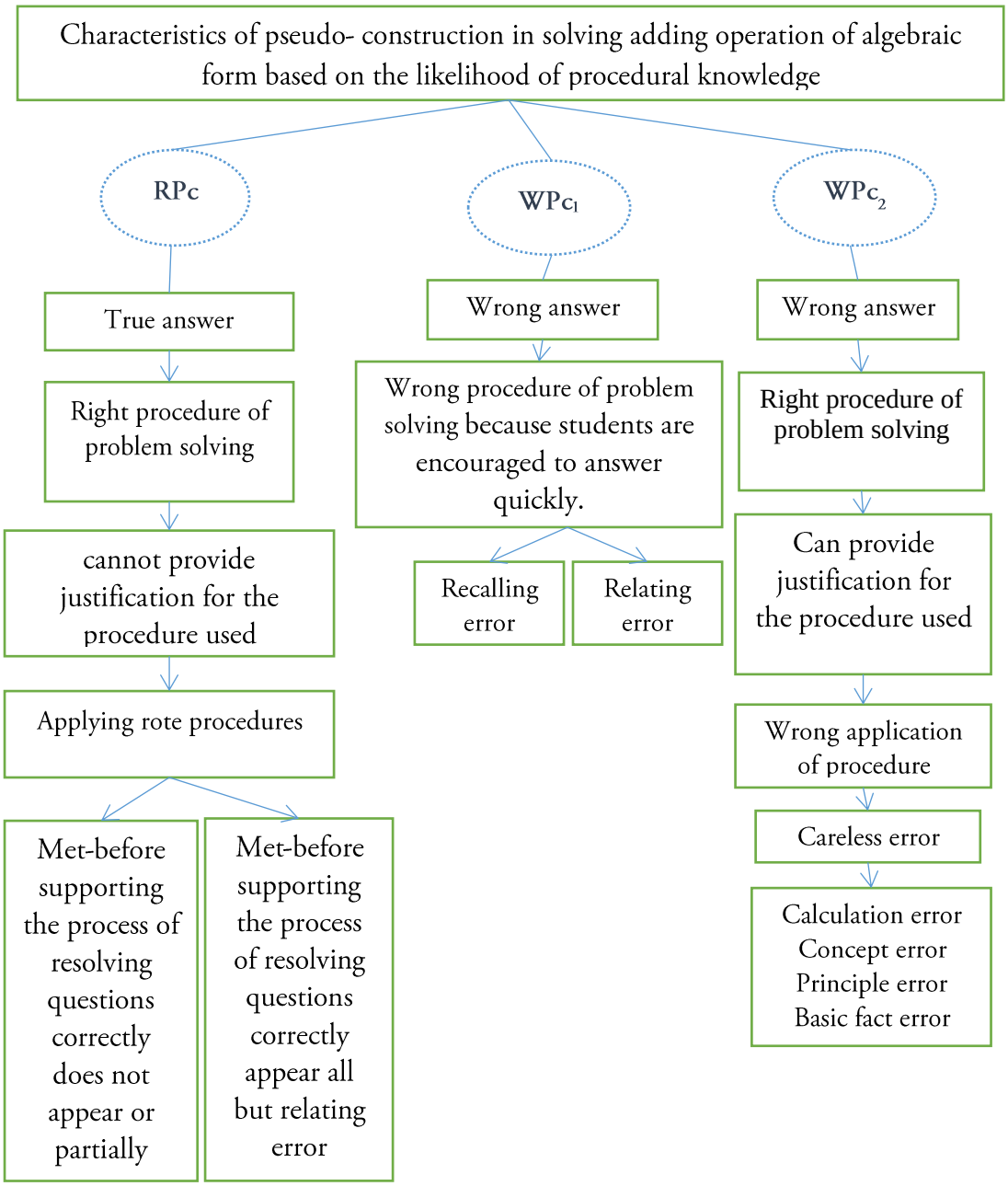
Wrong Pseudo-construction Type 2 (WPc2)

Following the structure of thinking one subject that is undergoing wrong pseudo-construction of type 2 when solve task instrument above.



Thinking structure on the subject in accordance with the structure of the problem, but the subject of finding a wrong answer. This indicates that the subject to solve problems by using the correct procedure and capable of providing justification for the procedure used. This is consistent with the behavior of analytic by Vinner (1997). However, subjects found the wrong answer because it made a mistake in applying the solving procedure i.e., the calculation error caused by carelessness (Elbrink, 2007). This means that the subject is in a state of wrong pseudo-construction (Subanji, 2007, 2011). The error occurs when the subject multiplying 4a to 5 which gained 15a. Nevertheless, after some reflection, the subject is able to correct his mistakes and find the correct answer (Saler & Edgington, 2006).

Researchers found several characteristics in solving algebraic sum of operation form based on the likelihood of procedural knowledge. The following chart describes these characteristics.



Conclusion

Based on the results of research and the discussion previous, we conclude that to solve problems based on the tendency of procedural knowledge, students have several characteristics. Following the characteristics intended.

First, right pseudo-construction occurred when students solve mathematical problems which they give the correct answer with the correct resolution procedures, but students are not able to provide justification for the procedure used. The cause is met-before supporting the process of resolving questions correctly does not appear or partially emerging, and met-before supporting the process of resolving questions correctly appear all but Relating error.

Secondly, wrong construction pseudo happens in the two conditions. First, the condition when the student gives the

wrong answer to the wrong resolution procedures, as students are encouraged to answer quickly. Secondly, the condition when the student use the correct resolution procedures, and students are able to justify the procedures used but gives the wrong answer because of careless errors.

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Developing the Students' Problem Solving, Critical Thinking Skill and Mathematics Disposition

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ABSTRACT

Developing problem solving and critical thinking skill is the goal of mathematics learning in cognitive domain. Problem solving skill is the students' skill to solve the mathematics problems through several steps: understanding the problem, planning the solution, solving the problem, and rechecking the problem. On the other hand, critical thinking is the ability in applying the concept, analyzing, synthesizing the problem, and evaluating the question. The affective domain should also be considered in learning including mathematics disposition. Mathematics disposition is the students' tendency to think and act positively including self-confident, diligence, responsibility, open-minded, interest, and inquisitive aspects, and to evaluate their thinking process and performance. The teacher can choose a learning model to support the students that is Reasoning and Problem Solving (RPS) learning model. RPS learning model can be used to help the students to solve the problem based on their knowledge, understanding, and skill through reasoning skill to achieve the learning goal.

Keywords: Problem Solving; Critical; Disposition; RPS

Introduction

In mathematics content standard, the objectives of learning mathematics include problem solving in understanding problem, planning the model, finishing the model, interpreting the solution, and respecting the use of mathematics in daily life by having curiosity and interest in learning and self-confidence in problem solving (Depdiknas, 2006). The objectives of learning mathematics mentioned are in line with competency standard Permendiknas No.23in2006stated that "competency standard of mathematics graduate is having logical, analytical, systematic, critical, and creative skill, and able to cooperate" (Muhaimin, 2008).

The learning objectives and competency above lade cognitive aspect including the problem solving and critical thinking skill. The problem solving skill is a high level of thinking, as stated by Gagne that high intellectual skill can be developed through problem solving (Suherman et al, 2001).The person who has a high level thinking skill is categorized into qualified human resources because he is able to solve both simple and complex problems. Beside problem solving skill, critical thinking skill should also be developed in order to help students to face the problems. According to Cabera in (Husnidar et al, 2014) mastering critical thinking is not only the learning objective, but also a process to enable the students to solve the problem in the future. It is an intellectual process by making concept, implementation, synthesis, or evaluating information from the observation, experience, reflex, thought, and communication as a basic to act (Kemendiknas, 2010). So that, in critical thinking, the students should

involve in application, analysis, and evaluation skill.

Moreover, affective aspect also involved in the learning objectives and competency including respecting the use of mathematics in daily life by becoming inquisitive, having interest, diligent, and confident to solve the problem and it is known as mathematics disposition. It is related to the way the students solve the problem and how they think flexibly to find other alternatives to solve the problem and they may need it in their life to face problematic situation later. Reasoning and Problem Solving (RPS) learning model can be used to develop problem solving skill, critical thinking, and mathematics disposition. Reasoning is a part of retention level including basic thinking, critical thinking, and creative thinking. Problem is a situation with uncertainty solution which confronts the individual or group to find the answer. Problem solving is the effort to find the solution to the problem by using knowledge, understanding, and skill.

Furthermore, Krulik and Rudnick in (Rochmad, 2013) stated that problem solving process is a series of heuristic steps which provides a scheme to problem solving. There are five steps of heuristic process: (1) reading and thinking, (2) expressing and planning, (3) choosing strategy, (4) finding the answer, and (5) reflexing and extending. These steps yield the positive effect including understanding, critical thinking, and meaningful knowledge (Rahyubi, 2012). Thus, by using RPS learning model, problem solving skill, critical thinking, and mathematics disposition can be developed.

Based on the background of the problem above, this article is aimed at discussing whether Reasoning and Problem Solving (RPS) learning model can be used to improve problem solving skill, critical thinking, and mathematics disposition.

Discussion

Mathematics Problem Solving

According to (Suherman, et al, 2001), the problem is a situation requiring a solution. So that, a question is becoming a problem when it is needed to be solved and the procedure cannot be done regularly. In solving the problem, a scientific method or systematic, logic, and accurate thinking is required (Dalyono, 2007). The goal is to solve the problem rationally and completely. Problem solving is a process to find previous combination of rules to solve the future problem (Nasution, 2000). Accordingly, a problem solving learning is designed to stimulate the students to use their skill, so they are able to understand the problem, plan the method and the procedure to solve the problem, check the credibility, and write the correct answer.

Problem solving is salient in mathematics. According to (Suherman, et al, 2001), problem solving is a part of important mathematics curriculum because the students they can use their background knowledge and skill to experience the learning in solving the problem. A strategy is needed to solve the problem, so the students are directed to solve it. According to Polya in (Suherman, et al, 2001), the steps to solve the problems:

1. Understanding the problem
   The students should state what they know and what is asked, and able to explain it in vignette or notation.
2. Planning the solution
   The students should pay attention to what is asked and to think the

solution by noticing the previous question.

3. Solving the problem as planned
   The students should solve the problem as the solution planned before.
4. Rechecking the solution
   The students check whether the answer is appropriate to the method.

Thus, to solve the problem, the students are required to understand the question, plan the solution, solve the problem, and interpret the solution. The students need to understand the problem before solving it because misunderstanding will lead them to the wrong solution.

In line with Polya, Sumarmo in (Husna, et al, 2013) stated that indicators in problem solving:

1. Identifying the elements being asked.
2. Formulating the problem or designing the model.
3. Implementing the strategy to solve the problem both about mathematics or not.
4. Explaining or interpreting the results based on the problem.
5. Using mathematics meaningfully.

According to Fung and Roland in (Sugiman, et al, 2001), the best mathematics problem should fulfill some criteria:

1. The problem should have several steps to be solved;
2. The problem can be solved by using more than one way or method;
3. The problem should be clear to avoid misinterpreting;
4. The problem should be challenging and is relevant to the students' daily life;
5. The problem should contain the value (concept) of real mathematics in order to improve understanding and knowledge.

Therefore, it is concluded that problem solving skill is a skill to enable the students to solve mathematics problem by using several steps: understanding the problem, planning the solution, solving the problem, and rechecking the solution.

Mathematics Critical Thinking

Learning process has a close relationship to forming and using thinking skill (Murlich, 2007).Thinking is a learning activity in which people acquire new discovery or at least they know the relationship between one thing and another. Thinking is a power to put relationships among knowledge and it is a conscious mental activity which is guided to certain purposes.

The process in thinking as follow:

a. Understanding forming by breaking out the general characteristics of a think to find the specific characteristic.
b. Premise forming, combining or disentangling some understanding to find the sign of the problem.
c. Decision forming, combining the premises.
d. Conclusion forming, making conclusion from the decision (Ahmadi, 2008).

Critical thinking is a systematic process which enables the students to formulate and evaluate their opinions and belief. It is an organized process which the students evaluate the proof, assumption, logic, and language that underlying the question. Critical thinking is a good thinking, and contemplating its process is a part of good thinking (Johnson, 2011). It is not

innate, but it should be developed by learning or training process.

Seriven and Paul (Kemendiknas) stated that critical thinking:

It is an intellectual process by forming a concept, implementing, doing synthesis, and/or evaluating the information gotten from observation, experience, reflection, thought, and communication as a basic to end and to act.

Accordingly, critical thinking consists of more extended process in education area by involving perception, language, emotion, consideration, skill, and attitude, and doing interpretation, analysis, evaluation, inference, explanation, and self-management.

Critical thinking is a high level thinking that helps to form the students' conceptual. The goal is to achieve a deep understanding (Johnson, 2011). The understanding reveals the meaning of an event.

According to Ennis, critical thinking is a logic and reflective thinking and focus on deciding what to believe or do (Fisher, 2008).Moreover, Annis in (Afrizon, 2012) identified12 indicators of critical thinking which is grouped in five activities:

a. Giving simple explanation by focusing and asking, analyzing question and asking, and answering the question being explained or stated.
b. Building basic skill by considering whether the source can be trusted, observing and considering observation report.
c. Concluding by deducting or considering the induction result, making and determining the scale value.
d. Giving further explanation by identifying terms and definitions of consideration and its dimension, and identifying assumption.
e. Arranging strategy and technique by determining the action and integrating with others.

Edward Gayer in (Fisher, 2008) listed the skills for critical thinking:

a. Recognizing the problem
b. Finding the solution
c. Collecting and arranging the information needed
d. Recognizing the assumption and unstated values
e. Understanding and using appropriate, clear, special language
f. Analyzing the data
g. Appraising the fact and evaluating the statement
h. Recognizing the logic relationship among problems
i. Making conclusion and similarity needed
j. Testing the conclusion and similarity
k. Reorganizing the patterns of belief based on the experience
l. Assessing things or qualities in daily life.

Based on the definition above, critical thinking is a logic skill to make, analyze, evaluate, and decide what to belief and to do by comparing the relevance between facts and assessment.

Mathematics Disposition

Katzin (Mahmudi, 2010) defined disposition as a tendency to behave consciously, frequently, and voluntary to achieve the goal. The behavior included self-confident, diligent, acquisitive, and flexible. In the concept of mathematics,

according to Katzin (Mahmudi, 2010), mathematics disposition is related to how the students solve the problem to explore different alternatives of solution. In the learning context, mathematics disposition is related to how the students ask, answer, communicate the ideas, cooperate, and solve the problem. On the other side, according to Kilpatrick, Swafford, and Findelin (Husnidar, et al, 2014), mathematics disposition is a tendency (1) viewing mathematics as an understandable matter, (2) considering it useful, (3)believing that learning mathematics diligently will be useful, and (4) behaving like an effective mathematics learners. So that, mathematics disposition describe someone's feeling and behavior toward mathematics. Furthermore, NCTM in (Mahmudi, 2010) defined mathematics disposition as tendency to think and act positively which is reflected by interest and self-confidence in learning mathematics and with a will to reflect their thought. Pearson Education (2000) proposed that mathematics disposition includes genuine interest in learning mathematics, persevering to find the solution, a will to find alternative solution or strategy, and appreciating mathematics and its application in various field.

According to NCTM (Pearson Education, 2000), mathematics disposition includes a will to take a risk and explore different solution, persevering to solve the problem, responsible for the work, appreciate the power of communication of mathematics language, a will to ask and propose ideas and try a different way of exploring the concepts, confident of his ability, and view the problem as a challenge (Mahmudi, 2010).

Based on the some quotations above, it is concluded that mathematics disposition skill is a skill that enable the students to think and act positively through several aspects including self-confident, diligent, responsible, open-minded, interest, curiosity, and a tendency to evaluate the process of thinking and performance.

According to Kilpatrick, Swafford, and Findelin (Husnidar, et al, 2014), the students mathematics disposition develop when they learn other aspects; for example, when building strategic competence to solve non regular problem, the students' behavior and belief will become more positive, and it is a prominent factor to be success in their learning.

NCTM (1989) in (Mahmudi, 2010) stated that mathematics disposition includes some components:

a. Confident to apply mathematics to solve the problem, to communicate mathematics ideas, and to give argument.
b. Think flexibly in exploring the ideas and try alternative methods to deal with the problem.
c. Persevering to do the task
d. Interest and have curiosity and inventiveness in mathematics activity.
e. Monitor and reflect the thought and performance
f. Respect the application in other science fields and daily life.
g. Appreciate the role of mathematics as a tool and language.

Polkingin (Syahban, 2009) proposed several indicators of mathematics disposition: (1) confident and diligent to do mathematics task, solve the problem, communicate and give reasons of mathematics; (2) flexible in investigating and finding alternatives of solution; (3) having interest, curiosity, and a will to

monitor and reflect the way they think; and (4) apply the mathematics in different situation, respect the role of mathematics in culture and value and as tool and language. In line with Polking, Kilpatrick, Swafford and Findellin (Syahban, 2009) elaborated mathematics disposition as follow: showing passion in learning mathematics, paying attention, persevering to solve the problem, confident to solve the problem, having curiosity and able to share with others in mathematics.

Therefore, based on the indicators above, it is concluded that the indicators in mathematics disposition:(1) confident in solving problem, communicating ideas, and reasoning;(2) flexible in exploring ideas and trying different methods to solve the problem; (3) bend on finishing the tasks;(4) interest and curious to find something new; (5) have a tendency to monitor and reflect the process of thinking and performance; (6) apply mathematics in other fields and in daily life;(7) respect the role of mathematics in culture and value both as a toll and a language.

Reasoning and Problem Solving (RPS) Learning Model

Reasoning And Problem Solving (RPS) learning model is a constructive alternative learning. Reasoning and problem solving skill is needed to solve the problems. Reasoning is a part of thinking in retention level including basic thinking, critical thinking, and creative thinking.

Basic thinking is the ability to understand the concept. Critical thinking skills are testing, relating, evaluating, collecting and organizing information, remembering and associating previous information, determining rationale answer, drawing valid conclusion, and doing analysis and reflection. Creative thinking is the ability to produce (idea, thought, creation, and so on) the original, interesting, and useful product.

Problem is a situation with an uncertainty solution which confronts an individual or a group to solve it. Besides, the problem solving is an effort to solve the problem based on the knowledge, understanding, and skill. It is also a learning activity which trains the students to solve the problem individually or group (Taufik, 2011). Thus, problem solving is begun by confronting and will be ended if the appropriate solution is found through reasoning skill (Rahyubi, 2012).

Furthermore, according to Krulik and Rudnick in (Rochmad, 2013) proposed that problem solving process is a series of steps following heuristic plan. Heuristik provided a scheme as a plan to a solution. The steps underlying the process of heuristic are the steps in Reasoning and Problem Solving (RPS) learning model. Thinking in each step is free and the students think alternatingly and sometimes it is not chronological, but each of them work to achieve the goal in subs problem solving.

Based on the explanation above, Reasoning and Problem Solving is a learning model which enables the students to find the solution for the problem by using their previous knowledge, understanding, and skill which is created by reasoning skill to achieve the learning goal.

According to (Taufik, 2011), there are five steps in Reasoning and Problem Solving (RPS) learning model:

a. Reading and thinking
    1) Identifying the fact and problem
    2) Visualizing the situation
    3) Describing the solution setting

b. Exploring and planning
   1) Organizing information
   2) Drawing the solution diagram
   3) Drawing the table, graph, and figure
c. Selecting model/strategy
   1) Determining the pattern
   2) Testing the pattern
   3) Simulating or experimenting
   4) Reduction or expansion
   5) Logic deduction
   6) Writing similarity
d. Finding the answer
   1) Estimating
   2) Using algebra and geometry computation skill
e. Reflecting and extending
   1) Correcting the answer
   2) Finding alternative solutions
   3) Extending the concept and generalizing
   4) Discussing the solution
   5) Formulating real various problems

Similarly, Krulik and Rudnick in (Rochmad, 2013) mentioned some stages in RPS learning model:

a. Reading and thinking stage
   The students think critically, the data is analyzed, the facts are tested and evaluated, the questions are determined, the physical setting is visualized, explained and understood, and the problem is translated in the language of the reader.
b. Revealing and planning stage
   The students analyze the data and consider the sufficient information, eliminate the trap, organize the data in the table, figure, or model. In this stage, the plan is developed to find the answer.
c. Choosing strategy stage
   The students try to determine the strategy. The difficult question in solving the problem is "how to choose the strategy". This stage is considered the most difficult. The strategy is a part of problem solving process which guides to a solution and it is chosen through two previous stages. Strategy is not the way to solve the problem as in algorithm trial and error, and a complex thought is needed to arrange it. In this stage, the students should think critically to find the best strategy.
d. Finding the answer stage
   The students involve in solving the problem, think logically and critically, and confirming the correctness of logical reasoning. The students use the appropriate concepts and procedures for their work to find the answer.
e. Reflecting and extending stage
   The students confirm the correctness of their steps and answer, and find other strategy to answer. Different kinds of problem solving are discussed, the strategies are compared to know their effectiveness. The problem can be changed or modified, for example, by changing the beginning condition or situation. If it is possible, the problem is extended to find the generalization or concepts based on the problem discussed.

Based on the explanation above, the writer concluded that the learning steps proposed by Krulik and Rudnick is more operational, easy to understand and to implement.

The best of Reasoning and Problem Solving (RPS) learning model as follow (Purwanta, 2010):

a. Train the students to design a discovery

b. Think and act creatively
c. Solve the problem realistically
d. Identify and investigate
e. Interpret and evaluate the observation result
f. Stimulate the students' thinking progress to solve the problem
g. The education will be more relevant to daily life especially in working field

In addition, (Rahyubi, 2012) stated that RPS learning model will give the positive impact including understanding, creative and critical thinking skill, and the skill to use the knowledge meaningfully.

In brief, based on the definition, the steps, and the best of RPS learning model, it can be used to improve problem solving, critical thinking, and mathematics disposition skill.

Conclusion

The researcher concluded the results of the research as follow:

1. The ability in problem solving is the students' ability to solve the problems in mathematics through several steps: understanding the problem, planning the solution, solving the problem, and rechecking.
2. The ability to think critically is the students' ability to logically make, analyze, evaluate, and decide what to do by comparing the relevance between fact and assessment.
3. The ability of mathematics disposition is the students' ability to think and act positively including self-confident, diligent, responsible, open-minded, interest, and curiosity aspects, and the tendency to evaluate thinking and performing process.
4. RPS is a learning model which helps students to solve the problems based on their knowledge, understanding, and skills seen in reasoning ability, they are basic thinking, critical thinking, and creative thinking to achieve the learning objectives.
5. Based on the definition, steps, and the advantages, RPS learning model is one of the learning models to develop the students' problem solving, critical thinking, and mathematics disposition.

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A Study on the Spatial Ability of Mathematics Education Students

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ABSTRACT

The background of the research is the students' mark of geometry subject was low. The geometry materials concern with spatial ability, so that the researcher wants to know how the spatial ability of the students in high, middle, and low level. The descriptive qualitative method was used in this research with the subjects research are 10 students which consist of 2 students are in the high level, 6 students are in the middle level, and 2 students are in the low level. Furthermore, the test and interview were used to collect the data and the techniques used to analyze the data were reduction, data display, and conclusion/ verification. The results show that the students in high, middle, and low level have the low spatial ability in spatial perception, and in general the Mathematics Education students at STAIN Bukittinggi in academic year 2014/2015 was low in all Spatial ability including spatial perception, mental rotation, and spatial relations.
Keywords: Spatial Abilities; Spatial Elements

Introduction

In the context of curriculum, The National Council of Teachers of Mathematics (NCTM, 2000) has determined five content standards in mathematics, those are number and its operation, problem solving, geometry, measuring and chance, and data analysis. It indicates that a spatial ability is a curriculum requirement in learning. The ability to visualize is a part of geometry activities to master as recommended by NCTM in (Kariadinata, 2010)The mathematics curriculum for grade 9-12 should include the study of the geometry of two, and three dimensions so that all student can interpret and draw three-dimensional object; represent problem situations with geometric models and apply properties of figures. In Indonesian national curriculum, the materials of space geometry should be mastered since elementary school to university.

Spatial geometry is a study of space things, relations, and transformations formed (becomes mathematics) and axiom's systems. A spatial ability is needed to comprehend space geometry as proposed by Soemadi (1994) that to learn geometry well, the learners should first understand the basic of geometry, the ability to prove, the skill to draw the basic of geometry, and the good space knowledge. Beside to understand the geometry materials, the spatial ability is needed in daily life and professionalism aspects as well such as the doctor's ability to know the position of heart, or other occupations like architect, plane designer, and so on.

However, the students' spatial ability in Indonesia today is low. It can be referred to PISA (Programme for International Student Assessment) results report which concluded that Indonesian students who were taken as the sample was in the fiftieth rank with the score 391 among fifty seven participants where the average of

international score is 500 (Puspendik, 2011).

One of the content domains tested to the students was geometry. Analysis done by PISA proved that only 33, 4% of the students were able to answer the questions. This fact implies that the students' spatial ability is low. Based on the interview to the lecturer, this case also happened to the university students in high, middle, and low level. This is in line with what stated by Susanta (1996) that geometry is a "ghost" for the students even the lecturers.

Based on the problems above, the researcher conducted the research about:

How is the spatial ability of the students in high, middle, and low level in mathematics education department Tarbiyah in academic year 2014/2015?

Review of the Related Theories

Spatial Ability

Piaget & Inhelder in Marliah (2006) stated that spatial ability is an abstract concept which includes the ability to observe the relationship of object position in the space, reference (the sign used as reference to determine the object position in the space), projective relationship (the ability to see the object from different perspectives), distance conservation (the ability to approximate the distance between two points), spatial representation (the ability to represent spatial relationship by manipulating cognitively), mental rotation (imagining object rotation in space).

Many experts defined the spatial ability including Tartre, Linn, and Petersen (Pitalis, Mousoulides, and Christou, 2006):

1). Spatial visualization as the mental skills concerned with understanding, manipulating, reorganizing, and interpreting relationship visually
2). Spatial visualization as the process of representing, transforming, generating, and recaling symbolic, non-linguistic information.

The ability to visualize the space is a process and thinking activity through verbal, analytic, and visual description to solve the problem. Furthermore, Gree's in Kariadinata(2010) proposed that the ability to visualize includes:

1). Spatial visualization (SV), which involves "the ability to mentally manipulate, rotate, twist or ivIert a pictorially presented stimulus object;
2). Spatial orientation (SR-O) which "the comprehension of the arrangement of the element within visual stimulus pattern and aptitude to remain unconfused by the changing orientations in which a spatial configurations may be presented'.

Some premises (McGee; Burnett & Lane,; Elliot & Smith,; Pellegrino et al.,; Clements & Battista in Kariadinata(2010) stated that two major components of spatial visualization have been identified: spatial relations and spatial visualization. In standardized spatial ability tests, spatial relations tasks involve 2D and 3D rotations and cube comparisons. Spatial visualization is described as the ability to imagine rotations of objects or their parts in 3-D space. According to the premises above, the ability to visualize is categorized into orientation/relation and visual space ability. Orientation/relation space ability is an ability to understand the elements in model and the relationship between those elements.

Spatial Elements

Maier (1996) proposed five elements of spatial ability:

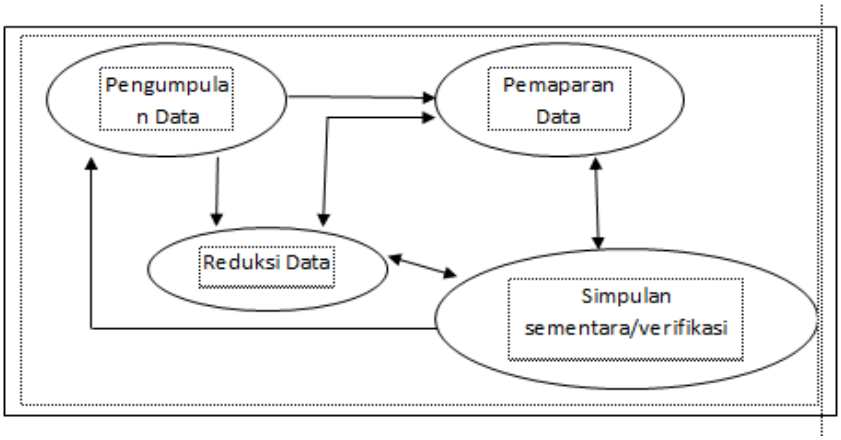
1) Spatial Perception
   Spatial perception is the ability to observe a model or parts of space positioned horizontally or vertically.
2) Visualization
   Spatial visualization is the ability to visualize or imagine the model with the removed of its parts.
3) Mental rotation
   Mental rotation is the ability to rotate a model appropriately and fast.
4) Spatial relations
   Spatial relations is the ability to understand the form of a model or its parts and the relationship between the parts.
5) Spatial orientation
   Spatial orientation is the ability to physically and mentally find a guidance in space and person in special spatial situation.

Based on the explanation above, three spatial abilities to be studied are spatial perception, mental rotation, and spatial relations because the other abilities spatial visualization and spatial orientation are better to be studied specially. Accordingly, the three abilities used to determine the position and the weaknesses of spatial abilities of third semester students of mathematics education section in academic year 2014/2015.

Research Procedures

Qualitative method was used in this research. According to Nasution, qualitative method is observing people in their environment, interacting with them, trying to understand their language and their interpretation of the world. According to Sunarto(2001), the subject is chosen by considering the goal and the data to be gotten. In this research, the subject is the third semester students who passed the space analytic geometry subject which consists of two students in high level, four students in middle level, and two students in low level. The data was gotten from the students and the lecturer of plane and space geometry subject.

Moreover, the data collected by using test and interview. The test used to collect the data about spatial ability and the interview used to uncover the wrong answers. The test used was the modification of the test developed by Suparyan (2007). Miles and Huberman data analysis technique in Sunarto(2001) stated that the approach used in qualitative research is the recycling approach. The steps in analysis include data reduction, data display, and conclusions/ drawing/ verification as the figure below:



Checking the data by triangulation was done by questioning the same questions by some techniques: test, interview, and documentation, and the resources are the third semester students and the geometry lecturer.

Checking the data by triangulation was done by questioning the same questions by some techniques: test, interview, and documentation, and the resources are the third semester students and the geometry lecturer.

Results and Discussion

Results

1. Spatial Ability Analysis

   Three elements of spatial ability used in this research:

   a. Spatial Perception (SP)
   b. Spatial Rotation (SR)
   c. Mantal Rotation (MR)

The elements above are explained in three groups of question. The score of the test results showed the differences of spatial ability including high, middle, and low ability. The scale of spatial ability: high (80-100), middle (65-79) and low (< 65).

Three types of question in spatial ability:

1. Spatial ability of spatial perception was in the question number 1 those are 1a, 1b, 1c, 1d, 1e, 1f, 1g, 1h, 1i, 1j and 1k
2. Spatial ability if mental orientation was in question number 2 those are 2a, 2b, 2c, 2d, 2e, 2f and number3 those are 3a, 3b, and 3c
3. Spatial ability of rotation spatial was in the question number4 those are 4a, 4b dan 4c.

Based on the researcher's study toward eight research subjects which T.01, T.02 (high level students), S.03 until S.06 (middle level students) and R.07, R.08 (low level students), and the comparison of spatial ability as follow:

Table.1. the comparison of spatial ability

Code number	High spatial ability	Middle spatial ability	Low spatial ability
T.01	-	-	SP, MR, SR
T.02	MR, SR	-	SP
S.03	-	-	SP, SR
S.04	-	-	SP, MR, SR
S.05	SR	MR	SP, MR,
S.06	-	-	SP, MR, SR
R.07	SR	-	SP, MR
R.08	-	-	SP, MR, SR

The table shows that:

1. The students with the high level spatial ability had the lowest ability in SP (2 subjects), MR (1 subject) and SR (1 subject), no middle ability, and the highest ability only in MR (1 subject) and SR (1 subject).
2. The students with the middle level spatial ability had the lowest spatial ability in SP (6 subjects), MR (3 subjects) and SR (3 subjects), the middle ability only in MR (1 subject), and the highest ability in SR (1 subject).

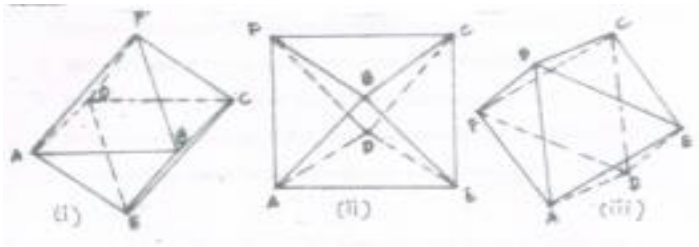
3. The students with the lowest level spatial ability had the lowest spatial ability in SP (2 subjects), MR (2 subjects) and SR (1 subject), no middle ability, and the highest ability only in SR (1 subject).
4. In general, the students in the high, middle, and low level had the lowest ability in SP.

Discussion

Spatial Ability

Based on the results analysis, Spatial Perception (SP) was the lowest spatial ability of eight research subjects. The element of spatial ability was in question number 1 on the test. One of the spatial perception questions as follow:

Regular plane-8 ABCDEF, with the edge = a cm. The plane is drawn in three positions as the figure below:



Questions:

a) How many symmetries are in the regular plane-8?
b) What is the shape of symmetry plane in the regular plane-8
c) How many congruent pyramids are in the regular plane-8?
d) How many pairs are parallel planes in the regular plane-8?
e) How far is the distance of two adversative points?
The answers are in the table below:

Table.2 the answers is true

Question number	Answer
1a	3 plane
1b	Square
1c	6 pyramid
1d	4 pairs
1e	a√2 cm

The answers of eight respondents:

Table. 3. The answers of respondents (Code T. 01)

Question number	Answer	Information
1a	8 plane	False
1b	Triangle	False
1c	4 pyramid	False
1d	4 pairs	True
1e	$a\sqrt{2}$ cm	True

Table. 4. The answers of respondents (Code T.02)

Question number	Answer	Information
1a	12 planes	False
1b	Rhomb	False
1c	6 pyramid	True
1d	4 pairs	True
1e	$a\sqrt{2}$ cm	True

Table. 5. The answers of respondents (Code S.03)

Question number	Answer	Information
1a	8 planes	False
1b	Triangle	False
1c	4 pyramids	False
1d	4 pairs	True
1e	$a\sqrt{2}$ cm	True

Table. 6. The answers of respondents (Code S.04)

Question number	Answer	Information
1a	8 planes	False
1b	Triangle	False
1c	2 pyramids	False
1d	4 pairs	True
1e	-	No answer

Table. 7. The answers of respondents (Code S.05)

Question number	Answer	Information
1a	2 planes	False
1b	Rhomb	False
1c	2 pyramid	False
1d	4 pairs	True
1e	2a	False

Table. 8. The answers of respondents (Code S.06)

Question number	Answer	Information
1a	4 planes	False
1b	Triangle	False
1c	4 pyramid	False
1d	4 pairs	True
1e	$a\sqrt{2}$ cm	True

Table. 9. The answers of respondents (Code R.07)

Question number	Answer	Information
1a	8 bidang	False
1b	Segitiga	False
1c	2 piramida	False
1d	6 pasang	False
1e	a cm	False

Table. 10. The answers of respondents (Code R. 08)

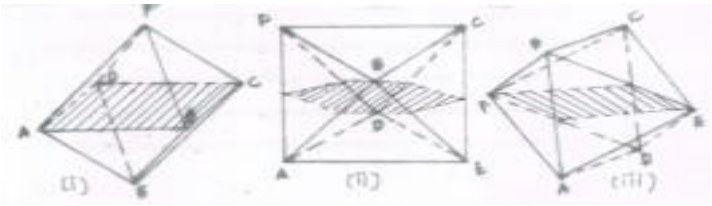
Question number	Answer	Information
1a	All the answers did not match to the questions	False
1b		False
1c		False
1d		False
1e		False

The continuance of the question,

If the model of regular plane-8 is a thing with hollow space, have transparent side, and is contained water. Draw the plane of water surface!

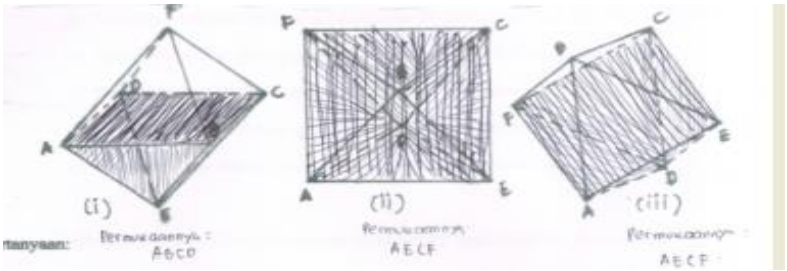
In the figure 1(i), 1(ii) and 1 (iii). Shade in on the plane of water surface!

The correct answer:

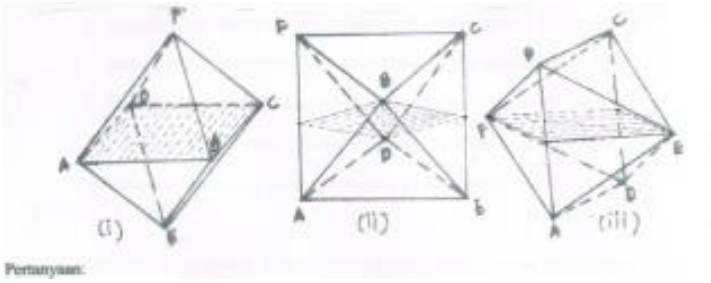


The answers of eight respondents:

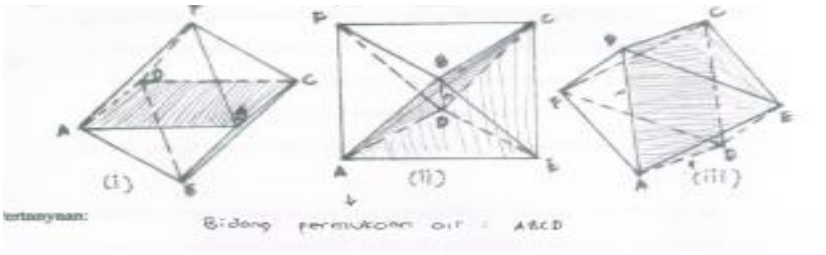
The answers of respondents (Code T. 01)



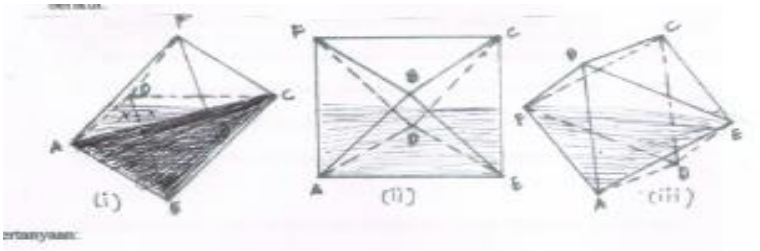
The answers of respondents (Code T. 02)



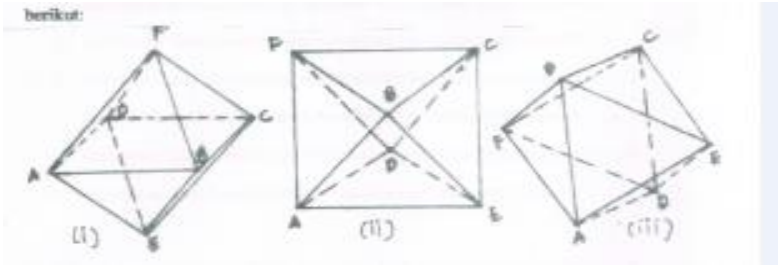
The answers of respondents (Code S. 03)



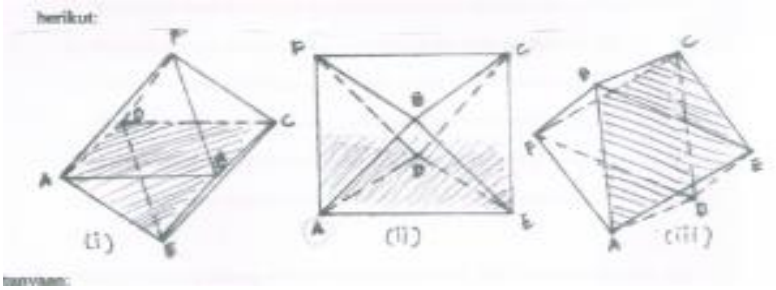
The answers of respondents (Code S. 04)



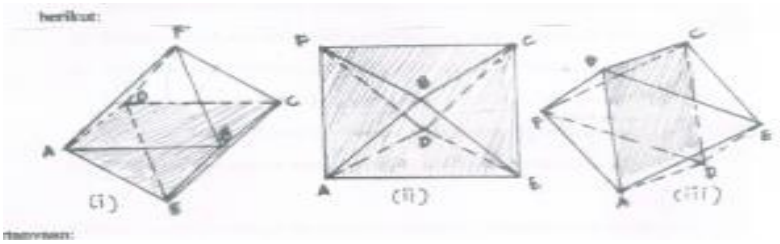
The answers of respondents (Code S. 05)



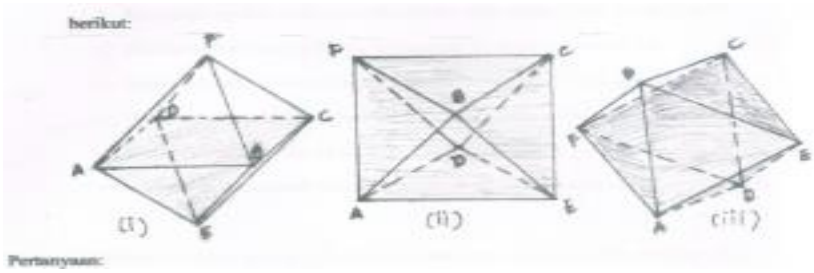
The answers of respondents (Code S. 06)



The answers of respondents (Code R. 07)



The answers of respondents (Code S. 08)



f) What is the shape of the plane of water surface in the figure 1(i)?
g) How wide is the area of the plane of water surface in the question f)?
h) What is the shape of the plane of water surface in the figure 1(ii)?
i) How wide is the area of the plane of water surface in the question h)?
j) What is the shape of the plane of water surface in the figure 1(ii)?
k) How wide is the area of the plane of water surface in the question j)?

The correct answers for the question 1f-1k:

Table.11. The correct answers for the question 1f-1k

Question number	Answer
1f	Square
1g	a2cm2
1h	regular angle 6
1i	3/8 a2√3 cm2
1j	Rhomb
1k	a2 √2/2 cm2

The answers of eight respondents:

Table. 12. The answers of respondents (Code T.01)

Question number	Answer	Information
1f	Square	True
1g	a2cm	True
1h	Square	False
1i	a2 cm	False
1j	Square	False
1k	a2	False

Table. 12. The answers of respondents (Code T.02)

Question number	Answer	Information
1f	Square	True
1g	a2cm2	True
1h	Rhomb	False
1i	a2 √2/2 cm2	False
1j	Rhomb	True
1k	a2 √2/2 cm2	True

Table. 13. The answers of respondents (Code S.03)

Question number	Answer	Information
1f	Parallelogram	False
1g	$a\sqrt{x(2x-x)}$	False
1h	Kite	False
1i	a2 √6/2	False
1j	Rectangle	False
1k	L= a2	False

Table. 14. The answers of respondents (Code S.04)

Question number	Answer	Information
1f	-	No answer
1g	7/8 a2	False
1h	Rectangle	False
1i	L= a2/2	False
1j	Triangle	False
1k	L= a2/2	False

Table. 15. The answers of respondents (Code S.05)

Question number	Answer	Information
1f	Hexagon	False
1g	-	No answer
1h	Square	False
1i	a2	False
1j	Hexagon	False
1k	-	No answer

Table. 16. The answers of respondents (Code S.06)

Question number	Answer	Information
1f	Parallelogram	False
1g	$a\sqrt{x(2x-x)}$	False
1h	Parallelogram	False
1i	$a\sqrt{x(2x-x)}$	False
1j	Parallelogram	False
1k	$a\sqrt{x(2x-x)}$	False

Table. 17. The answers of respondents (Code R.07)

Question number	Answer	Information
1f	Square pyramid square base plane	False
1g	L= base. height	False
1h	Square pyramid square base plane	False
1i	L= base. height	False
1j	Square pyramid square base plane	False
1k	L= base. height	False

Table. 18. The answers of respondents (Code R.08)

Question number	Answer	Information
1f	Rectangle	False
1g	Area as based and sideway as width	False
1h	Square AECF	False
1i	S x S	False
1j	Square AECF	False
1k	S x S	False

By considering the answers in the interview, the research subjects seemed to have some problems: misconception in symmetry plane and inaccurate and careless to determine the shape of formed plane. The misconception, inaccurate, and carelessness may cause errors in choosing formula, counting, perception, even determining the unit. To conclude, the spatial perception of spatial ability was still low.

Conclusions and Suggestions

Conclusions

1. The students with the high level spatial ability had the lowest ability in SP (2 subjects), MR (1 subject) and SR (1 subject), no middle ability, and the highest ability only in MR (1 subject) and SR (1 subject).
2. The students with the middle level spatial ability had the lowest spatial ability in SP (6 subjects), MR (3 subjects) and SR (3 subjects), the middle ability only in MR (1 subject), and the highest ability in SR (1 subject).
3. The students with the lowest level spatial ability had the lowest spatial ability in SP (2 subjects), MR (2 subjects) and SR (1 subject), no middle ability, and the highest ability only in SR (1 subject).
4. The results show that the students in high, middle, and low level have the low spatial ability in spatial perception, and in general the Mathematics Education students at STAIN Bukittinggi in academic year 2014/2015 was low in all Spatial ability including spatial perception, mental rotation, and spatial relations.

5. By considering the answers in the interview, the research subjects seemed to have some problems: misconception in symmetry plane and inaccurate and careless to determine the shape of formed plane. The misconception, inaccurate, and carelessness may cause errors in choosing formula, counting, perception, even determining the unit. To conclude, the spatial perception of spatial ability was still low.

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The Set of STAD Cooperative Learning Approach to Content of Geometry Problem Posing for Class X High School

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ABSTRACT

The purpose of this research is to produce cooperative learning package of STAD type by employing by problem posing approach which is valid, practical, and effective. This is a research and development which refers to 4-D model. The development process in first and second phase produced the learning package (textbook, student' s worksheet, lesson planning, and assessment of mathematics learning), the development of the third phase was a process of validation and package tryout. For the purpose of package tryout, the learning was conducted using syntax model of STAD type by employing posing problem approach. While the fourth phase, socialization was conducted to friends of teachers at school for improving learning package developed. The subjects of the study were 34 students of grade X1 at SMAN 2 Bantaeng. Research instruments used include the validation sheet, instrument of observation sheets, questionnaire of student' s responses on learning, and assessment of Mathematics learning. Such instruments except the test, are the instruments that have been used in previous studies by Fitriani (2005) but has been modified as a material adjustment to Geometry. The results show that the learning package developed after validation and tryout were conducted was valid, practical, effective, and efficient which feasible to be used in learning Mathematics. Analysis on the assessment of learning mathematics obtained the mean of 81.7 and 88% of students have achieved KKM in classical. The learning outcomes of students in learning Mathematics increased significantly after being taught using cooperative learning of STAD type with problem posing approach.

Keyword: learning package, cooperative learning of STAD type with problem posing approach.

Introduction

The learning process with the current school system has yet to show the maximum results. Learning in school is not a lot of touching or develop the potential of learners, it is evident from the value of the National Examination in South Sulawesi district Bantaeng, especially for high school in 2012, was relatively low with average qualifications of each of the subjects tested, namely the qualification C and D.

One of the factors that affect the implementation of the curriculum in every school that does not run properly. Learning in school is still less attention to the achievement of the competence of learners. This is evident in the learning device that lesson plan made by teachers that allows copy and paste from other teachers, instructors, or the downloaded from the internet, booklet finished from the dealer and the way teachers teach in classes that do not pay attention to models of innovative learning, The dominant use the lecture method where the teacher explains the material while many learners listen without any activity.

So that learners are motivated to learn individually and significantly, the potential

for curious learners need to be raised and developed. Generating motivation learners need to use a curiosity approach. Problem posing approach to learning can hone and train students to ask questions or do the questions pertaining to the material being studied. According to Moses (in Fitriani S, 2005: 2) when the students were asked to answer questions posed by the teacher or, to be found high levels of anxiety in self-learners. This is due learners feel afraid of or assume the idea is not good enough. In learning to apply problem posing, these feelings can be reduced. Learners are led to pose a problem or question according to their interests and think of a way to resolve. Attention and communication of mathematics learners through problem posing approach would be better because the question that only quality can be raised and resolved by learners who have serious attention to math. Problem posing has an important role in the learning of mathematics because it constitutes the core of the activities of learners, for example, learners construct their own problems as a first step before entering the steps in solving problems. Sutiarso (in Syufri 2013) suggested that prolem posing is one of the non-conventional learning in the process of building the structure of cognitive activities of learners by linking schemes already owns. Even further he argued that the problem posing is one of the activities in learning mathematics that can enable learners, learners develop thinking skills to solve problems, and lead to a positive attitude towards learning mathematics.

According to Hamzah Upu (2003: 10) problem posing can be done individually or classical (classical), pairs (in pairs), or in groups (groups). Problems or questions posed by individual learners not load the intervention of other learners. Questions submitted without first addressed by other learners. This can result in a matter of less developed or less complete information content. Questions posed in pairs can carry more weight than the question posed individually, on condition that occurs collaboration between learners learners such pairs. If the question was formulated by a small group (team), then the quality will be higher both from the stage of completion and information content. Cooperation among learners can spur creativity and complement their shortcomings.

Results of interviews with school principals, supervisors, and high school teachers 2 Bantaeng said that when learners have difficulty in completing tasks based on the given issue, they will work together with friends. So that teachers found in the learning process there needs to be an approach that can be directed learning setting. Teachers' usual grouping of learners in the learning process but do not use the steps or phases commonly used in STAD Cooperative. So when offered a problem posing approach in STAD Cooperative learning is new to them and respond positively. With the implementation of the curriculum of 2013 in the education unit simultaneously demanding to engage learners in the learning process, give students more time to think, respond to, and help each other, and enable learners in the process of discussion, so expect learners can work together in a group and can form the characters of learners, especially in discipline and responsibility for tasks that are part of them. One key component of the curriculum implementation of 2013 is the implementation of the learning process held inside and / or outside the classroom

to help students achieve competency attitudes, knowledge and skills.

Therefore, the authors chose cooperative learning approach in problem posing for teaching geometry class X high school. In cooperative learning, students are divided into small groups are heterogeneous. They will work as a team to understand the subject matter and accomplish a given task. Material geometry selected for these materials often encountered learners in everyday life can make learners motivated and give your ideas to create questions based on their experience. This can reduce the confusion of learners in the face of cooperative learning with problem posing approach that was new to them.

To support the learning process with a set of cooperative problem posing approach goes well it needs the appropriate learning tools. Learning devices provide convenience and can help teachers to prepare and implement teaching and learning in the classroom. Based on the above, the authors conducted a Software Development STAD Cooperative Learning Approach to Content Geometry Problem Posing for Students of Class X High School. Learning tools developed included lesson plan, textbooks, activity sheets learners, and assessment of learning mathematics.

Research Method

This type of research is the development of research (research development). This research was conducted at SMAN 2 Bantaeng with research subjects are students X1 class numbering 34 people in the second semester of the school year 2013/2014. Set development models used in this study refers to the development of four D Models (model 4-D), which consists of four phases, namely:

a. Definition Phase
   This phase aims to establish and define the learning needs by analyzing the goals and limits of the material. Activities in this phase is the end of the preliminary analysis, analysis of learners, concept analysis, task analysis, and specification of learning objectives.
b. Designing Phase
   The purpose of this phase is to produce a prototype learning developed
c. Developing Phase
   The activities at this phase is the validation of the device by two experts, and testing devices that have been revised based on advice from experts / validator.
d. Disseminating Phase
   Activities undertaken at this phase is the proliferation of devices that have been produced in the form of socialization of subject teachers of mathematics

Data collection instruments used in this study is the observation sheet activities of learners, learning device implementations observation sheet and questionnaire responses of learners.

The validity of the learning device will be determined by comparing the average total validity of whole grains with the validity criteria following ratings:

$3,5 \leq V \leq 4$	very valid (sv)
$2,5 \leq V < 3,5$	valid (v)
$1,5 \leq V < 2,5$	quiet valid (cv)
$0 \leq V < 1,5$	invalid (tv)

Information: V is the validity of the learning device

Category enforceability of any aspect or all aspects of the enforceability of the device cited Nurdin (2007: 144) is:

1,5 ≤ M ≤ 2,0 fully implemented
0,5 ≤ M < 1,5 partially implemented
0,0 ≤ M < 0,5 not implemented

Data on the observation of activity of students during the implementation of the cooperation within the group analyzed and described. The determination of the percentage of time of each section based on the time available for such activities in the RPP.

The analysis to calculate the percentage of the number of students who responded in each category were asked in a questionnaire sheet using the formula t:

$$PRS = \frac{\sum A}{\sum B} x100\%$$

(Trianto, 2013:243)

Information :

PRS = many percentage of students who responded positively to the category in question.

$\sum A$ = the number of learners who give a positive response to each of the categories asked in the questionnaire.

$\sum B$ = the number of students who were the subject of the trial.

The device and the learning process is said to be effective if more than 50% of all students responded positively to at least 70% of all aspects in question.

Result and Discussion

Analysis of the results of the validation study can be described as follows:

1) The results of Lesson Plan validation analysis showed that: (1) the overall aspects of the Lesson Plan is considered very valid (average 3.6) and (2) the Lesson Plan relatively reliable because the value reliability above 75% (98%), is in accordance with the terms of reliability (Borich in Trianto). Thus, the Lesson Plan has met the criteria of validity. Validator also concluded that the RPP can be used with minor revisions.
2) The results of validation analysis of textbooks show that: (1) Overall aspects of textbooks considered to be valid (average 3.6) and (2) Textbooks these subjects classified as reliable because the value of reliability of 90% (above 75%) , is in accordance with the terms of reliability (Borich in Trianto). Validator also concluded that the textbooks can be used with minor revisions.
3) Results of the validation analysis Activity Sheets show that: (1) the overall aspect rated highly valid Sheets Activities (3.5) and (2) the Activity Sheet relatively reliable because the percentage 0f agreement (R) is 89%

(above 75%), accordance with the terms of reliability (Borich in Trianto). Validator also concluded that the Activity Sheet can be used with minor revisions.

4) The results of the validation analysis Mathematics Learning Assessment shows that (1) all aspects of Mathematics Learning Assessment rated "Invalid" an average of 3.4 (2) Mathematics Learning is classified as reliable because all aspects of the value reliability above 75% (percentage of agreementnya is 90, is in accordance with the terms of reliability Borich in (Trianto). Validator also concluded that the Assessment of Learning Mathematic can be used with minor revisions.

The above description indicates that in general the average assessment or validation results from two validators on a learning device that is used include lesson plans, text book lesson, activity sheets, and Mathematics Learning Assessment in the category "Very Valid". This means learning device has been eligible to be tested.

1. Trial learning device

Based on an analysis of all components in the learning device that is a component enforceability of syntax, social interaction, reaction principle can be concluded that all of the components that are in a category that is implemented entirely in the interval (1, 5 ≤ M ≤ 2, 0).

Mathematics assessment results are shown in the following table.

Table 1. Description Learning Math Completeness Rating

Score	Category	Frequency	Percentage
0 – 69	Not Completed	4	11,8 %
70 – 100	Completed	30	88, 2%

According to the criteria, effectiveness, mastery of Mathematics Learning Assessment learners already meet the standards of classical completeness. In general the results of the data analysis activities of learners showed that the activity of the 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th at each meeting is in the range of tolerance limits thus it can be said that the activities of learners have been achieved as expected based on the criteria of effectiveness.

From the all aspects of the observed average of the positive response given by learners was 95% and an average of 5% for a negative response. From the three criteria of effectiveness, the test three aspects are met, namely: the mastery of Mathematics Learning Assessment, the activities of learners, learner response. Based on the criteria of effectiveness can be concluded that the trial, the learning device has been effective because it has met all the indicators of the effectiveness of including indicators Mathematics Learning Assessment. The results obtained above indicate that the test is done, the learning device has met the criteria of validity, practicality, and effectiveness.

From the analysis of the validity of the learning device that includes: (1) Lesson Plan, (2) the text book lessons, (3) Activity Sheet, and (4) Mathematics Learning validation value is within the interval (3.5 ≤ V ≤ 4), which means an overall average of validated devices that are in the category of "very valid" with the value of reliability R ≥ 75% means that in the category reliable.

Based on observations during the test of the learning device by two observers stated that the enforceability of the device is as expected for all components into votes in the instrument executed entirely by the level of adherence to the average values obtained (1.5 ≤M≤2, 0). And R ≥ 0.75 or R ≥75%.

Effectiveness analysis device STAD cooperative learning approach to problem posing by 3 things: (1) Ratings Mathematics Learning of 34 students there were 88% of learners who have been thoroughly studied. Thus, mastery of Mathematics Learning Assessment learners already meet the standards of classical completeness. (2) the activity of learners; In general the results of the data analysis activities of learners showed that the activity of the 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th at each meeting is in the range of tolerance limits thus it can be said that the activity of learners is reached as expected, and (3) the response of learners; from all aspects of the observed average of the positive response given by learners was 95% and the average for response to negative 5%.

Conclusion

Based on the results of research and testing devices STAD cooperative learning with problem posing approach to the material at a grade geometry X1 SMAN 2 Bantaeng obtained some conclusions as follows:

1. The development of learning tools in this study using a model 4-D consists of four phases, namely the definition (define), design (design), and development (develop), and the deployment phase (disseminate). Learning tools generated in this study is the lesson plan for 4 meetings, textbooks, activity sheets, and Mathematics Learning Assessment.
2. General results of the development of learning tools in this study is valid, practical and effective. (A) Draft of Lesson Plan, Books Learners, Sheets activities and assessment of learning mathematics are categorized as "Very Valid" based on rating 2 experts (b) Practical, based on the observation by the observer that the learning device performing well during the test try and (c) effective, has to meet three criteria: the classical learning completeness reached, the student activity effective and positive response to learning.

Based on the results obtained from this study, it can put forward some suggestions as follows. Learning tools developed in this study meets the criteria of good quality so it is recommended to be implemented by teachers in the classroom for the material geometry.

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Learning Active Creative Effective and Fun in Learning Mathematics at the Elementary School

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ABSTRACT

This study is a quasi-experimental research which aims to demonstrate the effect of the application of active learning strategies effective creative and fun (PAKEM) on the results of primary school students' mathematics learning. Design studies using this type of comparison group pretest-posttest design. The study population was students of SD Negeri 38 Bonto Perak Pangkep. Samples were fourth graders totaling 47 learners and spread in two classes. Class IV A is set as a class experiment that treated active and creative learning and class IV into class B control. The instrument used in this study was the observation sheet and math achievement test. The data analysis using t-test with SPSS 20.0 for windows. Results showed no effect of active learning strategies effective creative and fun (PAKEM) the results of fourth grade students learn math SD Negeri 38 Bonto Perak Pangkep with a p-value = 0.01 <0.05.

Keywords: PAKEM, mathematics learning outcomes

Introduction

Mathematics is a basic science that became a tool to study other sciences. It is therefore absolutely necessary mastery of mathematics and mathematical concepts should be understood correctly from the outset. Planting a mathematical concept began to be taught in primary school students.

Successful learning in elementary mathematics is strongly influenced by the role of the teacher. If teachers are to understand correctly the mathematical concept and can motivate students to participate in the learning of mathematics, the purpose of learning mathematics in school will be achieved optimally. Teachers also need to understand the characteristics of students. Characteristics of real students have a broad scope, one of the characteristics of students to note the teacher is on the cognitive development of students.

Based on Piaget's theory of cognitive development, elementary school age children are in the concrete operational period. Children need the help of concrete objects to understand something abstract, like the concepts in mathematics. In accordance with the learning atmosphere characteristics elementary students are learning atmosphere that is exciting and fun.

Learning math will be more effective if done in an atmosphere of fun. Therefore, teachers must seek their situation and pleasant conditions by applying the method of learning fun. In addition, the required use of media and interesting props by using concrete objects that exist in the environment.

Creative Active Learning Effective and Fun (PAKEM) is a learning that allows students working on diverse activities to develop skills and understanding with emphasis on learning by doing. Teachers

use a variety of sources and study aids, including utilizing the environment. Teachers encourage students to find their own way in resolving a problem and express their ideas.

Some of the advantages PAKEM in learning mathematics such as 1) the students will be more motivated to learn because of variations in the learning process, 2) students are not saturated, and 3) the student can solve a problem by making use of the surrounding environment. PAKEM can create a conducive learning environment and meaningful capable of giving students the skills, knowledge and attitudes to life. The implementation of PAKEM is expected to affect the results of fourth grade students learn math SDN 38 Bonto Perak Pangkep.

Research Methodology

This study is a Quasi-Experiment. The study involved two groups: the experimental group was taught by applying PAKEM strategies in mathematics and a control group that was taught without applying PAKEM strategy. The study design used is a two-group pretest-posttest design.

Variables observed the strategy of Creative Active Learning Effective and Fun (PAKEM) as the treatment variable (independent variable) and mathematics learning outcomes as the dependent variable.

The population in this study were all fourth grade students of SD Negeri 38 Bonto Perak Pangkep the academic year 2015-2016. The sample selected two classes to be the experimental group and the control group.

The stages will be done in carrying out the research, namely:

Preparation Phase

1. Manage licensing of schools to be a place of research
2. Identify the problem to be investigated
3. Reviewing the curriculum and selecting materials to be used in research
4. Creating Learning Implementation Plan (RPP), Student Activity Sheet (LKS), and teaching materials
5. Creating such research instruments achievement test and student activity observation sheet
6. Conducting expert validation of the instruments that have been made
7. Establish an experimental class and control class

The implementation phase

1. Conducting pre-test the experimental class and control class
2. Implement learning activities using strategies of PAKEM the experimental class and learning activities without using the strategy of PAKEM the control class
3. Conducting post-tests on the experimental class and control class.Tahap analisis data
4. Analyzing Research Data
5. Describing conclusions based on data analysis
6. Data were analyzed using descriptive statistics and inferential statistics. Learning outcomes data were analyzed using t-test that begins with a test for normality and homogeneity test.

Result and Discussion

The research was conducted for six sessions. The first meeting was giving the

students pretest. The second to fifth meeting of the learning is done by using strategies of PAKEM the experimental class and learning without using of PAKEM strategy in the control class. The subject is taught is the integer operations. The sixth meeting posttest be giving to students.

Descriptive Statistics Analysis Results

Results of pretest for 24 students IV A (experimental group) SD Negeri 38 Bonto Perak Pangkep shows the average score reached 66.12 mathematics learning outcomes of an ideal score of 100. The highest score achieved by students is 100 and the lowest score of 40, with a standard deviation amounting to 18.30. Results of pretest for 23 students IV B (control group) D 38 Bonto Negeri Perak Pangkep shows the average score reached 65.60 mathematics learning outcomes of an ideal score of 100. The highest score achieved by students is 100 and the lowest score of 30, with a standard deviation amounting to 20.05. This indicates the beginning of students' knowledge of these two classes is not much different. After the students from the two classes given different treatment is learning to use strategies of PAKEM to class IV A and learning without using PAKEM strategy for class IV B, students were given a posttest. Results posttest 24 grade IV A shows the average score reached 78.04. The highest score achieved by students is 100 and the lowest score is 40, with a standard deviation of 15.89. Students who achieve mastery learning (KKM 70) as many as 19 people or by 79.17%. Results posttest 23 grade IV B shows the average score reached 68.86 mathematics learning outcomes of an ideal score of 100. The highest score achieved by students is 100 and the lowest score of 30, with a standard deviation of 20.60. Students who achieve mastery learning (KKM 70) as many as 15 people or by 65.21%.

The following table presents a comparison of the results of the posttest class IV A (the experimental class with a class IV B (control group).

Table 1. Comparison of Statistics Experiment group and Control group

Statistic	Value of Experimental Group Statistics	Value of Control Group Statistics
Number of samples	24	23
Highest Score	100	100
Lower Score	40	30
Average Score	78,04	68,86
Standard Deviation	15,89	20,60
Completeness	19	15
Completeness Percentage	79,17%	65,21%

At posttest results, there are significant differences between classes using of PAKEM strategy with classes that do not use of PAKEM strategy, with a difference of 9.18.

If the test scores of mathematics learning outcomes are grouped into five categories, then the comparison of the frequency distribution of scores and percentages as shown the following table.

Table 2. Comparison of Categorization score of Experimental group and Controls group

Score	Category	Experimental Group		Control Group	
		Frequency	Percentage	Frequency	Percentage
0 – 54	Very Low	2	8,33	5	21,74
54 – 64	Low	1	4,17	1	4,35
65 – 79	Moderate	8	33,33	5	21,74
80 – 89	High	6	25,00	4	17,39
90 – 100	Very high	7	29,17	8	34,78
Total		24	100,00	23	100,00

Comparison of learning outcomes completeness at experimental group and control group is presented in the following table.

Table 3. Comparison of Experimental group Learning Outcomes completeness and Control group

Score	Category	Experimental		Control	
		Frequency	Percentage	Frequency	Percentage
0 – 69	Incomplete	5	20,83	8	34,78
70 – 100	Completed	19	79,17	15	65,22
Total		24	100,00	23	100,00

Results of statistical inference Analysis

Test of Prerequisites

Requirements that must be met before a test of the hypothesis is tested for normality and homogeneity.

The Test of Normality Pretest at Experimental Class and Class Controls

Normality test experimental class and control class using the Kolmogorov-Smirnov test using SPSS 20, 0 for windows with α = 0, 05.

Based on the results of the test output variance normality using the Kolmogorov-Smirnov test p-value of the experimental class is 0, 20. According to the decision-making criteria if the p-value is greater than or equal to α then Ho is accepted. This indicates that the data derived from the experimental class pretest normal distributed population.

Based on the results of the test output variance normality using the Kolmogorov-Smirnov test p-value of the control class is 0.20. According to the decision-making criteria, if the p-value is greater than or equal to α then Ho is accepted. This indicates that the data pretest control classes derived from normally distributed population.

Normality Test Posttest Experimental Class and Class Controls

Normality test experimental class and control class using the Kolmogorov-Smirnov test using SPSS 20.0 for windows with α = 0.05.

Based on the results of the test output variance normality using the Kolmogorov-Smirnov test p-value of the experimental class is 0.05. According to the decision-making criteria, if the p-value is greater than or equal to α then Ho is accepted. This indicates that the data posttest control group derived from a population that is normally distributed.

Based on the results of the test output variance normality using the Kolmogorov-

Smirnov test p-value of the control class is 0.20. According to the decision-making criteria, if the p-value is greater than or equal to α then Ho is accepted. This indicates that the data posttest control group derived from a population that is normally distributed. Therefore, the second grade sample normal distribution, we then do a test of homogeneity of variance.

Homogeneity Test Results Pretest Experiment Class and Class Controls

Test the homogeneity of two variances between the control class and experimental class with Levene Statistic test using SPSS 20.0 for Windows with α = 0.05. After processing the data, the results of the test output homogeneity of variance using Levene test Statistic p-value is 0.35. Because the p-value is greater than α, it can be concluded that the control class and experimental class derived from populations that have the same variance, or both classes homogeneous.

Homogeneity Test Results Posttest Experimental Class and Class Controls

Test the homogeneity of two variances between the control class and experimental class with Levene Statistic test using SPSS 20.0 for Windows with α = 0.05. After processing the data, the results of the test output homogeneity of variance using Levene test Statistic p-value is 0.19. Because the p-value is greater than α, it can be concluded that the control class and experimental class derived from populations that have the same variance, or both classes homogeneous.

Two similarity means test (t-test)

Similarity Test Results Mean pretest Class Two and Class Experiment Control

Both classes are normally distributed and had homogeneous variances, then test the equality of two mean using t-test by SPSS 20.0 for Windows assuming both homogeneous variance (equal variances assumed) with α = 0, 05.

The hypothesis formulated in the form of statistical hypothesis as follows:

$H_0 : \mu_1 = \mu_2$ Opponent $H_1 : \mu_1 \neq \mu_2$

Information:

μ1 : parameter the average score of students' mathematics learning outcomes experimental class before treatment

μ2 : parameter the average score of students' mathematics learning outcomes control class before treatment

After processing the data, with a p-value of t-test is 0, 72. Because the p-value is greater than α, then H0 accepted or learning outcomes both classes before treatment did not differ significantly.

Test Similarity of Average of posttest Class Two and Class Experiment Control

Both classes are normally distributed and had homogeneous variances, then test the equality of two mean using t-test by SPSS 20.0 for Windows assuming both homogeneous variance with α = 0, 05.

The hypothesis formulated in the form of statistical hypothesis as follows:

$H_0 : \mu_1 = \mu_2$ Opponent $H_1 : \mu_1 \neq \mu_2$

Information:

μ1 : parameter the average score of students' mathematics learning outcomes experimental class after treatment

μ2 : parameter the average score of students' mathematics learning outcomes after treatment control class

After processing the data, with a p-value of t-test is 0, 01. Because p-value less than α, then H0 is rejected, so it can be concluded that the results of learning math

students taught using the strategy of Active, Creative, Effective and Fun (PAKEM) had a significant difference to learning outcomes math students taught without using the strategy of Active, Creative, Effective, and Fun (PAKEM).

Student Activity

Data from student activity observation on the class IV A, i.e., the class taught by using strategies Active, Creative, Effective, and Fun (PAKEM) are presented in the following table.

Table 4. Student Activity at the experimental class

No.	Student Activity	Amount of active student in the meeting						Average	Percentage	Category
			1	2	3	4	5	6			
1.	Students who pay attention to the teacher's explanations			20	22	20	23		21,25	88,54	Active
2.	Students active notes subject matter			19	22	21	24		21,50	89,58	Active
3.	Students who actively ask			15	18	21	23		19,25	80,20	Active
4.	Students who do exercises given by the teacher			20	20	21	24		21,25	88,54	Active
5.	Students are quick and precise work on exercises	Pretest		18	18	17	19	Posttest	18,00	75,00	Active
6.	Students who presented the results of individual tasks / group			14	12	12	15		14,00	58,33	Inactive
7.	Students who find and solve problems			13	12	14	15		14,25	59,37	Inactive
8	Students who submit material at the end of the lesson			16	18	20	22		19,00	79,16	Active
Average										77,34	Active

Observations for meetings I through IV meeting showed that:

The percentage of students who pay attention to the teacher's explanation 88.54%

The percentage of students who are active record subject matter 89.58%

The percentage of students who actively ask 80.20%

The percentage of students who do the exercises given by the teacher 88.54%

The percentage of students who are quick and precise work on exercises 75.00%

Percentage of students who presented the results of individual tasks / group 58.33%

The percentage of students who find and solve problems 59.37%

The percentage of students who concluded the material at the end of the lesson 79.16%.

The average percentage of student activity on the implementation of

mathematical learning using PAKEM strategy on the subject of integers is 77, 34%. In accordance with the criteria of student activity predetermined researchers that the students said to be active in the learning process if the number of active students more than or equal to 75%, both for the student activity per indicator and average student activity. Thus it can be stated that the activity of students in the learning process of mathematics subject integers using PAKEM strategy has achieved active criteria.

Conclusion and Suggestion

This study was conducted to determine the effect of applying the effect of applying strategy of Active Learning Effective Creative and Fun (PAKEM) on student learning outcomes. There are two classes given different treatment. Experimental class taught by implementing PAKEM strategy, while the control class is not applied PAKEM strategy. Based on the results of descriptive statistical analysis, found that the average results of experimental class learning at 78.04 with a standard deviation of 15.89 and a control class 68.86 with a standard deviation of 20.6. On average the study of student's experimental class is greater than the control class. This shows that the implementation of the strategy of Active Learning Effective Creative and Fun (PAKEM) led to the study of student's experimental class is better than the control class. In addition, the number of learners who achieve the experimental class KKM more, that 19 people with a percentage of completeness of 79.16%, compared to the control class, which only reached 15 people with a percentage of 65.21%.

Based on the results of inferential analysis we concluded that the results of learning mathematics students who are taught by implementing strategies Active, Creative, Effective and Fun (PAKEM) had a significant difference with students who received conventional learning.

Activities of students in participating math by implementing strategies AJEL subject of integers in grade IV SD Negeri 38 Bonto Silver with observations during the learning process showed that two of the eight aspects of the observed yet eligible active, but some students are already active in the following learning process. Based on the student activity indicator that student activity is successful / effective if the average student activity is greater than or equal to 75% of students who are active in expected activity during the learning process. The results of the analysis of data on student activity observation which is the average percentage has reached 77, 34%. This suggests that the activity of the students have reached the active criteria.

Active Learning Strategies Effective Creative and Fun (PAKEM) can increase the activity of learning and student learning outcomes, so that could be an alternative learning of mathematics, particularly on the subject of integers.

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Improving Mathematics Communication of Junior High School Students through Inquiry Alberta Learning Model

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ABSTRACT

This research was a quasi-experimental design with pretest-posttest control group, in order to know the extent of the effect of inquiry Alberta model learning in improving students' mathematical communication skills. The samples were VII.D class as experimental group and VII.E as control class of SMP Negeri 27 Bandung. The results and discussion show the contribution of inquiry model of Alberta to the improvement of communication capabilities mathematical were seen during the learning takes place. Communication skills of students trained through a question and answer, discussion and percentages. At this stage of processing occurred debriefing between students and students, and between students and teachers, in this stage the teacher facilitated students to uncover the ideas, concepts, opinions or ideas of students. Sharing stage, the students discussed in groups, in this discussion students expressed ideas, ideas or opinions in completing the worksheets to find concepts. At this stage, the students expressed their ideas that they have discussed in class, in order to provide an explanation in responding unclear statements.

Keywords: Alberta Inquiry Model, mathematic communication

Introduction

Mathematical communication skills are ability to inteprete and express mathematic idea in writing, orally or in demonstrating way. In the study of mathematics by using traditional learning, communication is still a largely a one-way affair. Students' ccommunication are still limited in the short verbal answers to the questions posed by the teacher. From the problems that were given by the teacher, the students have constraints in terms of language and math symbols in expressing and explaining in front of his friends. In general, the communication can be interpreted as a way to convey the message from the messenger to the message recipient to notify, or good behaviors verbally, and indirectly through the media. In a communication, it is important to pay attention to the way of delivering the message to a person, so it can be understood by others.

Hadi (2012) states that one reason of learning mathematics for the students is that mathematics are a very powerful communication tool, thorough, and not confusing. Because of the importance of mathematical communication skills should be developed in learning, so that students can communicate ideas, thoughts, or opinions in learning mathematics. Schoen, et. al (in Nurningsih, 2013) suggests that mathematical communication is not merely express ideas through writing, but as far back as the student's ability in speaking, reading, explain, describe, listen, inquire, and cooperation. Through mathematical communication skills

students can express understanding verbally or in writing, but it has not been fully implemented because there are many students have low ability in mathematics. It was partly explained in the study Subagiyana (2009), and Madia (2010) which showed that the students' mean score of mathematics ability was in less qualification.

The research findings by Setiawan (in Herlina, 2012) showed students' mathematical communication skills of SMP were the mean difference between control and experimental group reached 20%. The low results indicated that students have not been able to use mathematical communication in solving problems or in carrying out the process of solving a problem that has been done.

Research Questions

Based on the problems background above, the main research questions of this research are as follows:

1. Is the students' communication skills of mathematical achievement through Inquiry Alberta Learning Model better than students who received conventional learning?
2. Is the improvement of the students' communication skills of mathematical achievement through Inquiry Alberta Learning Model better than students who received conventional learning?

The objectives of the Study

This study aimed at examining students' achivement and improvement of mathematical communication ability through Inquiry Alberta Learning Model. The expected significance of this study was the students could develop their mathematical communication ability, and the teacher who involved in this study could gain and apply Inquiry Alberta Learning Model.

Operational Definition

The following are the operational definitions of the variables that involved in this study.

a) The ability of mathematical communications capabilities include:

1. The ability to explain ideas, situations, and problems in writing in the form of images;
2. Ability to illustrate mathematical ideas in the form of mathematical models;
3. The ability to express a mathematical description in their own language in writing; and
4. The ability to declare a daily occurrence in the language or mathematical symbols

b) Inquiry Learning Model Alberta Learning Model include: planning phase (planning), at this stage students are directed and guided to formulate and understand the issues that need to be discussed; at the stage of remembering (retrieving), at this stage the students were asked to recall the relevant materials related to the issues discussed (processing); the finishing stage (creating), at this stage the students get a solution or information on the problems and students are directed to be creative to solve those problem more than one way; stage (sharing); at this stage the students do classroom discussion that has been gained; and the last stage is the stage of evaluation (evaluation), at this stage the students test their answers, it is included by comparing with other students.

Mathematical Communication Ability

Communication is the interaction that occurs between the message recipient or the interaction between the recipient of the message and its message, for example, the interaction between teachers and students and among students themselves. When students experiencing learning difficulties, these problems should be solved together in an environment of students, thus giving birth to a mutual understanding between them and the problem can be solved that contain elements of group learning.

Students are given the opportunity to work in groups in collecting and presenting data, listen to ideas, discuss together and then deducing, indirectly, students learn to communicate and construct their own knowledge. In the NCTM (2000), explained that communication is an essential part of mathematics and mathematics education. This implies communication in the learning of mathematics is essential. Through communication students can submit their ideas to the teachers and other students.

NCTM (2000) mentioned standard mathematical communication skills for students kindergarten through 12th grade is the student can:

1. Organize and consolidate their mathematical thinking through communication
2. Communicate their mathematical thinking coherently and clearly to teachers, students, and others.
3. Analyze and evaluate the mathematical thinking and strategies of others
4. Using the language of mathematics to express mathematical ideas precisely.

Many issues or problems presented by the language of mathematics, for example, presents a problem or problems into mathematical models that can be diagrams, mathematical equations, mathematical models, graphs, or tables. According Sumarmo (1987) suggests the presence of a symbol in mathematics, communication between individuals or between individuals and objects become easier.

Greenes and Schulman (Ansari, 2003) stated mathematical communication are (1) expressed the idea mathematically through writing, speech, demonstrations, and described visually in a different type, (2) to understand, interpret, and assess the ideas presented in written, oral , or visual form, and (3) construct, interpret, connecting diverse representation of ideas and relationships. Mathematical communication is not just convey ideas but in terms of communication, including talk, explain, listen, inquire, cooperation, write and convey what he had learned.

Sumarno (Hendriana, 2009) states that mathematical communication abilities include the ability: (1) Connecting the real objects, pictures and diagrams into mathematical ideas; (2) Describe the ideas, situations and relationships mathematically orally or in writing with real objects, pictures, graphs and algebra; (3) declare a daily occurrence in the language or mathematical symbols; (4) listen, discuss and write about mathematics; (5) Reading comprehension or writing mathematical presentation; (6) Make a conjecture, make the argument, formulate definitions and generalizations; and (7) Explaining and made inquiries about the math they have learned.

In this research, communication measured by the researchers is mathematically written communication i.e the ability of students to make the argument and expression, as well as provide a written explanation based on data and relevant evidence.

For the purposes of this study, we propose communication skills in mathematics, namely: (1) the ability to explain ideas, situations, and problems in writing in the form of images; (2) ability to illustrate mathematical ideas in the form of mathematical models; (3) the ability to express a mathematical description in their own language in writing; and (4) ability to declare a daily occurrence in the language or mathematical symbols.

1. Inquiry Alberta Learning Model

According to Donham (in Alberta Learning, 2004), inquiry learning model of Alberta is an inquiry-based learning that consists of several stages. Basically, the Alberta model of inquiry learning is a method of inquiry freely modified. In learning, the problem is determined by the teacher so that the content is not out of the curriculum issues, the limited guidance given by the teacher and the student steps in the process to solve the problem before leaving from the process of reflection. Reflection and the process is at the core of the steps in the process further.

The stages in Inquiry Alberta Learning Model based on Donham (in Alberta Learning, 2004), it consists of planning, retrieving, processing, creating, sharing and evaluating.

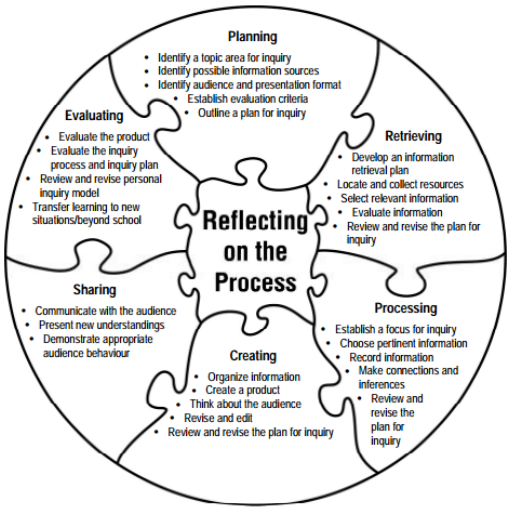

Figure : The Stages of Inquiry Alberta Learning Model

Planning stage, at this stage students are directed and guided to formulate and understand the issues that need to be discussed; retrieving stage, at this stage the students were asked to recall the relevant materials related to the issues discussed; creating, at this stage the students get a solution or information on the problems and students are directed to be creative solve the problem more than one way; sharing, at this stage the students do classroom discussion that has been gained; and the last stage is the stage of evaluation, at this stage the students test answers, including answers compare with other students.

Some of the main components contained in the Inquiry Learning Model according to Donham Alberta (Alberta Learning, 2004), namely:

1. Phase planning (planning), includes:
   a) Identify the given problem to be investigated or resolved.
   b) Identify the various sources of

information provided.
c) Identify the advice of friends and how to deliver it.
d) Create or define how to vote.
e) Make a plan outline solution.

2. Phase recall (retrieving), includes:
a) Collecting information to determine the settlement plan.
b) Find and collect resources.
c) Select relevant information.
d) Examine and look back a plan that will be investigated.
3. Stage finish (processing), includes:
a) Set focus to be investigated.
b) Choose a variety of related information.
c) Write down or record information.
d) Make connections and conclusions.
e) Check and look back a plan that will be investigated.
4. Phase creating (creating), includes:
a) Set the information.
b) Creative in determining the settlement.
c) Taking into account the discussion partners.
d) Revise and change the things that are necessary.
e) Check and look back plan was investigated.
5. Phase (sharing), includes:
a) Communicate with friends.
b) Presenting about a new understanding.
c) Indicates something acceptable theme.
6) Phase evaluate (evaluating), includes:
a) Evaluate the results that have been obtained.
b) Evaluating the process in steps overall.
c) Check and revise the method of inquiry individually.
6. Can use similar methods in other situations or problems.

2. Some studies about Mathematical Communication Ability and Inquiry Alberta Learning Model of few studies

Several studies on the ability and disposition of creative thinking and inquiry learning model of Alberta has done, inquiry learning models Alberta positive effect on student achievement. Studies that include Risnanosanti (2010), Kartini (2011) and Apiati (2012).

Risnanosanti (2010), in his research "Mathematically Creative Thinking Ability and Self Efficacy against Student Mathematical School (SMA) in Learning Inquiry". The results showed that the development of creative thinking student's ability obtaining mathematical inquiry learning is significantly better than students who received regular learning. These results illustrate that the inquiry learning to develop students' mathematical ability to think creatively. This happens because the inquiry learning students are given the opportunity to resolve the issue with his own ideas, answer a variety of ways, so it will show a wide range of settlement.

In Kartini (2011) research, she concluded that students who earn inquiry learning model Alberta gained increased ability to think creatively mathematically higher than conventional learning students. Inquiry Learning Model Alberta by Kartini can be used as an alternative in the process of learning mathematics in order to improve students' mathematical ability to think creatively, because the students are given the opportunity to explore his abilities, express opinions, and solve problems given teachers with ideas and his own way.

Meanwhile, according to Apiati (2012), concluded that an increase in mathematical problem solving ability of students who received Alberta inquiry learning model is better than students who received conventional learning. For the students 'attitudes towards learning which includes the students' attitudes toward learning by inquiry method models Alberta, discussions, and questions the ability of understanding and solving mathematical problems is positive.

Research Design and Instrument

This study was quasi experimental design with control group pretest and posttest. It aimed at examining the role of inquiry alberta Learning model toward students' mathematical communication ability. The sample of this research was VIID as experimental class, it consisted of 36 students; and VIIE as control class, it consisted of 37 students. The instrument used was the test of mathematical communication ability.

The following is shown the itmes of the test in this study:

1. You were asked to make a rectangle of wire at 24 cm. Draw 4 possibilities rectangles shapes that can be created amd its size. Find the area of the largest rectangle.
2. A triangular garden square shaped, it was known the long side in front of the right angle is 15 meters, while one of the other 12 meters.

a. Make the situation into an image that is easily understood.
b. Make a mathematical model to determine the length of the other side and specify its length.
c. The garden owners want to put fertilizer into the ground around the garden. How many packs of fertilizer farmers needed if 1 kg of fertilizer used to fertilized land area of 9 m2?

Findings and Discussions

Mathematical Communication Ability

The following are findings regarding students' mathematical communication skills as presented in Table 1. After normality test average pretest data is the ability to think mathematically obtained that the data are not normally distributed, while the average post-test normality test data is the ability to think mathematically obtained normal distribution of data. The results of the data analysis in Table 1 are presented in the following findings.

a. The mean pretest mathematical communication skills for overall in the class of inquiry Alberta model and conventional classes are not much different.
b. Average posttest of mathematical communication skills are reviewed as a whole, the class inquiry Alberta models is better than the conventional classroom.
c. Achievement and improvement of communication skills with students learning mathematical inquiry Alberta learning model better than the students who received conventional learning. The score posttest on inquiry class conventional model of Alberta is 10.58 (66.15%) and 8.27 (51.69%), post-test mean score of communication skills of inquiry grade students' mathematical model of Alberta better than conventional classes.

Table 1. Descriptive Statistics of Mathematics communication ability

KAM Category		Statistic Data	Inquiry Alberta Model		Conventional	
			pretest	Posttest	pretest	Posttest
Mathematical communication ability	Low	$\bar{x}$	2,30	7,90	2,54	5,23
			14,38%	49,38%	15,87%	32,69%
		SD	0,73	0,88	1,05	1,42
	Average	$\bar{x}$	5,30	11,25	6,00	9,58
			14,38%	70,31%	37,50%	59,87%
		SD	1,51	1,58	0,94	1,68
	High	$\bar{x}$	6,50	12,83	8,20	11,20
			40,63%	80,21%	51,25%	70,00%
		SD	1,99	2,32	0,84	2,39
	Total	$\bar{x}$	4,67	10,58	5,08	8,27
			29,17%	66,15%	31,76%	51,69%
		SD	2,16	2,21	2,24	2,85

Note: Maximal Score = 16

Students' Difficulties

In the further analysis, the item of mathematical communication ability is still relatively difficult about drawing a mathematical situation. Most students cannot complete the task. While the items belonging Midah is looking for some possibility of a given square image.

Conclusions, Implication

Conclusions

There are differences in students' mathematical communication skills in students who learn by Inquiry Alberta Learning Model and the students who studied with conventional. Inquiry Alberta Learning Model is better than learning by conventional but the ability of both was moderate.

The learning activities in the classroom, Inquiry Alberta Learning Model already performing well. Although at the beginning of the meeting, it was still needed an adjustment period, but at the next meeting the learning took place in accordance with the steps that have been determined.

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The Influence of Reward and Punishment toward Students' Activeness in Mathematic Lesson

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ABSTRACT

The aim of this study was to find out the influence of reward and punishment toward students' activeness. This was a quantitative research using survey method. The research subject was the students of Sekolah Dasar Negeri Klapanunggal 04 Kecamatan Klapanunggal Kabupaten Bogor grade four consisting of two groups with the total number of students was 108. This research was conducted in the first semester of academic year 2015/2016. This quantitative research was conducted by testing the validity and reliability of the instrument, followed by a sample survey with a valid and reliable instrument. Then, the research findings showed that the effect of reward and punishment toward the students' activeness shown by statistical analysis (ρ xy) was 0.970. It showed that there was the influence of reward and punishment toward students' activeness, while determinant coefficient (r^2) was 0.919 or by 91.9%. This result means the average value of students' activeness was 91.9% determined by reward and punishment, through the regression equation y = 41.02 + 1,02X. The remaining of 8.1% student was determined by other factors. The regression equation can be interpreted that before students take notice of reward and punishment has had the constant students' activeness of 41.02. This means that any increase in the unit value of reward and punishment will lead to an increase in the student activeness of 1.02 units. It can be concluded that there are positive influence of reward and punishment toward students' activeness.

Keywords: Reward and Punishment, Students' activeness.

Introduction

To achieve success in realizing the goals of education, students' activeness has a major impact on the students themselves and the teachers, that is students' activeness in the classroom will encourage students to gain knowledge, obtain learning experience and develop all their potential.

Students' activeness in learning is necessary, because basically, learning is doing. Doing is to change behavior. There is no learning if there is no activity. That is why the activity is an important principle in teaching and learning interactions.

Therefore , it is needed a way to enhance students' activeness in learning which is indicated by increasing response or feedback, so that thorough learning can be achieved. The proper way to solve the problem is through the provision of reward and punishment. Giving reward is one of the educational tools in learning process conducted by educators to students to encourage and motivate students to be more active.

In teaching and learning activities, educators can give rewards in any form to students who excel in completing the task, correctly answer questions, brave to come in front of the class, in which it is expected

to increase Students' activeness and discipline in the classroom, obedient and orderly to school regulations, and so on.

Punishment is educational method used by educators to motivate students to correct their mistakes. Punishment given by educators can be said to be effective if it makes the students regret their mistakes and motivate them to correct the mistakes without feeling down.

Reward and punishment can be taken as an effective tool in improving students' activeness to achieve educational goals. Based on the explanation above, the researchers are interested to conduct the research about the influence of Reward and Punishment toward the students' activeness in Mathematic lesson at the fourth grade of Sekolah Dasar Negeri Klapanunggal 04 Kabupaten Bogor at the first semester in academic year 2015/1016".

Theoretical Study

Rusyan (2006:45) reveals that activeness is defined as an activity involving the students physically, mentally, intellectually, and emotionally to gain learning outcomes which integrate cognitive, affective, and psychomotor aspects. According to Mayer in Ma'mur (2011:67), students' activeness is not only attending the class, memorizing, and completing the exercise, but the students should involve actively in terms of mental and physical in teaching and learning process.

Hamzah and Mohamad (2013:78) states that students' are active when they get involved in learning process. Bruner in Ma'mur (2011:76) argued that when the students are already engaged in teaching learning process, then they can recall the information given previously, then it can be categorized as active. Warsono and Hariyanto (2013:12) define students' activeness simply as teaching method involving the students actively in teaching and learning process.

Hamzah and Mohammad (2013:75) said that the characteristics of students' activeness based on learning guidance with model of ALIS (Active Learning in School, 2009) are as follows:

1. Students-centered learning
2. Contextual
3. Learning encourages students to interact multidirectional (student – teacher)
4. Learning uses the environment as a learning resource or learning media
5. Structuring the learning environment allows students to engage in learning
6. Teachers monitor student learning
7. Teachers to provide feedback on the students outcomes.

Rusyan (2006: 45) concludes the characteristics of student activeness include: emotional intellectual engagement in learning activities, cognitive accommodation in achieving knowledge, deeds, and direct experience toward the formation of attitudes and values.

Gagne and Briggs in Karwati and Priansa (2014: 154) suggest the factors that can foster the emergence of students' activeness in learning process:

1. Provide motivation or attract the attention of students so that they play an active role in learning activities.
2. Describe the instructional purpose (basic competences to students)
3. Advise the learning competence to students.
4. Provide stimulus (issues, topics, and concepts to be learned).
5. Give instructions to the students how to learn.

6. Bring up the activity, the students' participation in learning activities.
7. Giving feedback
8. Conducting assessment on learners in the form of tests so that the students' ability can always be monitored and measured
9. Summing up any of the material presented at the end of learning.

According to Sumiati and Asra (2011: 239), factor affecting the students' activeness in learning process that need to be grown on students is the sense of need, so that they are motivated to learn. Needs and encouragement that comes from oneself enables the process of active learning, and whatever is learned will be adjusted to what they need.

Factors of activeness expressed by Rusyan (2006: 46) is learning, because learning is essentially the result of the interaction process between the individual and the environment for learning is not merely as an attempt to respond to a stimulus, but more than that, learning is done through various activities, such as understanding, doing and experiencing.

Giving reward can also be done at school. Teachers can give gifts to students who excel and active. Giving reward is not only be done in report division but also in teaching and learning process.

Djamarah and Zain (2013: 150) suggests that reward is something given to others as an award or souvenir. Reward given to another person can be in any form, depending on the desire of the giver. It could also be adapted to one's achievements.

Yamin (2012: 309) argued that Reward is positive educational tool and its function is as an instrument of positive repressive educator tool. Reward is also motivation tool to learn more active.

Sardiman (2011: 92) suggests kinds of reward as follows:

1. Giving score as a symbol of the value of learning activities.
2. Rewards can also be regarded as a motivation.
3. Rivals / competitions can be used as motivational tool to encourage students learning.
4. Ego-involvement raise awareness to students to feel the importance of the task and take it as a challenge to work hard at the risk of self-esteem, is one important motivation.
5. Give test to the students will make them study harder.
6. Knowing the results will encourage students to study harder.
7. Praise, is a form of positive reinforcement and good motivation.

According to Djamarah (2010: 194), the kinds of reward are based on the type and form. There is a reward in the form of material; there is also a reward in the form of deeds. The examples of teachers' attitude and behavior that can be regarded as reward to the students are: (1) gestural form, (2) verbal form, (3) in the form of job, (4) in the form of materials, and (5) In the form of activities.

Faturohman and Sutikno (2010: 21) argues that the punishment given to students who make mistakes during the learning process. This punishment is given with the hope that students will change themselves and try to trigger motivation. Terminologically, punishment has many definitions. Punishment is educational measurement for educative functional quality of students who have problems, and punishment is an early vaccination in the educational context for those who have problem (Fajar, 2005: 199).

Sumantri and Syaodih (2006: 2:42) reveals that punishment is physical or psychological sanctions against a fault or offense committed by the student intentionally. Meanwhile, Djamarah (2013: 156) argued that punishment is a negative reinforcement, but is needed in education.

Ahmadi (1991: 157) argues that there are several kinds or types of punishment, as follows:

1. Punishment for Revenge
   People are unhappy because students make mistake and then punished.
2. Physical Punishment
   These punishment give adverse effects to students, it can even cause health problems for them.
3. Sweet Orange Punishment
   Naughty Students should not be punished, but should be approached personally.

Methodology

This research used survey method with causal approach to gain the influence of reward and punishment toward the students' activeness in mathematic lesson at the fourth grade students of Dasar Negeri Klapanunggal 04 Kecamatan Klapanunggal Kabupaten Bogor. This causal study was conducted at the fourth grade students of Dasar Negeri Klapanunggal 04 Kecamatan Klapanunggal Kabupaten Bogor consisting of 52 students from March to September 2015.

Findings

This research consists of two variables, the students' activeness (Y) and Reward and Punishment (X) which is then analyzed and described quantitatively using mean, median, modus, score interval, standard deviation, maximum score, minimum score, sample, total score, number of class and class interval.

1. *Students' activeness variable*

The frequency distribution of the Students' activeness data showed that score frequency of the students' activeness at class interval is 100 to 109 with a frequency of 7 students or by 13.46 % , the class interval of 110 to 119 with a frequency of 8 students or by 15.38 % , interval class 120 to 129 with a frequency of 5 students or by 9.61 % , class interval of 130 to 139 with a frequency of 11 students or by 21.15 % , the interval from 140 to 149 with a frequency of 8 students or by 15.38 % , interval 150 to 159 with a frequency of 6 students , or by 11.53 % and the interval 160 to 169 with a frequency of 7 students or by 13.46 %. The results of the frequency distribution can be seen in the following histogram:

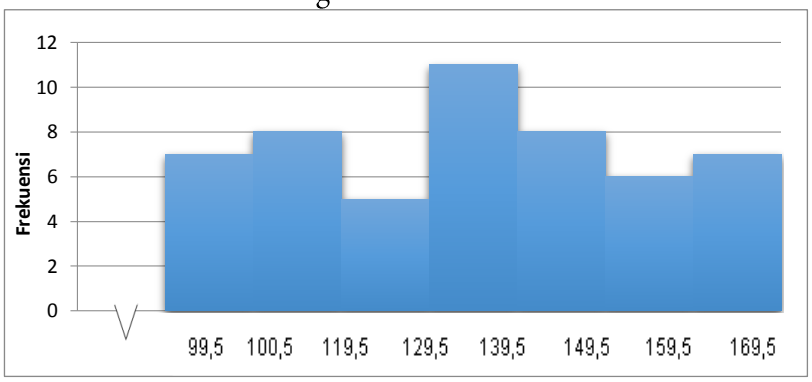

Figure 4.1. Histogram of Students' activeness

Figure 4.1 shows that the highest grade interval is indicated by the interval 130.5 to 139.5 as many as 11 students (21.15%)

2. Reward and Punishment Variable

Based on the data frequency distribution about variety of teaching styles showed that the frequency is at intervals of grade 70 to 77 with a frequency of 17 students or by 32.69%, the class interval 78 to 85 with a frequency of 7 students or by 13.46% , the class interval 86 to 93 with a frequency of 5 students or by 9.61%, the class interval 94 to 101 with a frequency of 7 students or by 13.46%, the interval 102 to 109 with a frequency of 7 students or by 13.46% , the interval 110 to 117 with a frequency of 4 students or equal to 7.69% and the interval 118 to 125 with a frequency of 5 students or by 9.61%. The results of the frequency distribution can be seen in the following histogram:

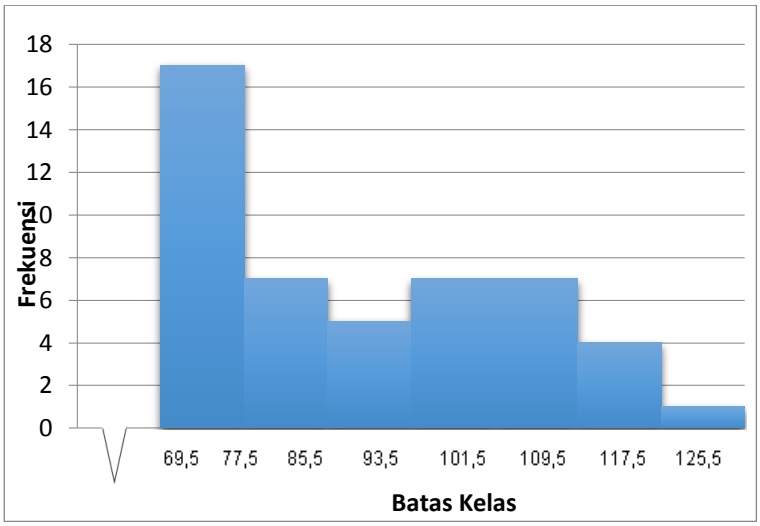

Figure 4.2. Histogram of Reward and Punishment

Figure 4.2 shows that the highest class interval in terms of reward and punishment is in the interval 59.5 to 77.5 as many as 17 students (32.69%).

Discussion

The discussion consists of the description of the data analysis found in the research process. This research was conducted on students in class IVA and IVB State Elementary School 04 Klapanunggal, Klapanunggal District of Bogor Regency. It is done by giving questionnaire for the reward and punishment variable (X) and the students' activeness (Y).

Based on the results of questionnaires from reward and punishment variable, it can be seen that the students who have the highest frequency is in the interval 70-77 with number of absolute frequency is 17 and relative frequency is 32.69%. Furthermore, it is also known that interpretation of the level of the average value of reward and punishment is 91.30 categorized as excellent with interval values 89-100. While the highest frequency of the students' activeness is in the interval 130-139 with the number of absolute frequency is 11 and the relative frequency is 21.15%.

Furthermore, the interpretation of the level of the average value of students'

activeness is 134.5 categorized as excellent with value interval 127-150.

The results Liliefors normality for Y over X indicates that the sample is in normal distribution. Then, homogeneity testing using Fisher's test showed that population is homogeneous.

Hypothesis testing is using Pearson Product Moment Correlation. The analysis showed a positive influence of the variables of reward and punishment to the student activeness, with the equation of Y = 41.02 + 1.02X. Furthermore, the results of significance test of correlation coefficient obtained t = 28.22, while ttabel with α = 0.05 and df = 31 is 2.423. The value of ttest is greater than the value of ttable which shows that the correlation between the variables of reward and punishment (X) to the students' activeness (Y) is positive and highly significant.

The strength of the effect of reward and punishment toward the students' activeness resulted in a correlation coefficient (r) = 0.970 which shows that there is a very strong influence between reward and punishment toward the students' activeness, while the determination coefficient (r2) is 0.919 or 91.9%. This means that the increase or decrease in students' activeness affected by reward and punishment amounted to 91.9%, while 8.1% of the activity of students is influenced by other factors.

Conclusion

Based on the results of causal research conducted using a quantitative approach in chapter IV, it can be concluded that there is influence between reward and punishment toward the students' activeness at the fourth grade students at State Elementary School 04 Klapanunggal Klapanunggal District of Bogor Regency in Odd semester of academic year 2015/2016

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Physics Education:

The Influence of Learning Model and Thinking Style Toward Physics Problem Solving Ability in Senior High School

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ABSTRACT

The research aimed to discover the influence of learning model and thinking style toward Physics problem solving ability of students at SMAN 22 Makassar. The research was a quasi-experiment research. The population of the research was all of the students of class XI IPA at SMAN 22 Makassar of academic year 2014/2015 which consisted of 4 classes with the total 160 students. The samples were selected by using simple random sampling technique and obtained class XI IPA1 and XI IPA2. The design of the research was factorial design 2×4. The instruments of the research were thinking style questionnaire, problem solving ability test, and learning model implementation observation sheet. The data of the research were analyzed by using descriptive statistic and inferential statistical analysis with GLM Univariate analysis. The average scores of the students' problem solving ability on Physics taught by problem based learning model and guided inquiry were 80.80 and 80.79. Inferential statistical analysis result gained the significant score 0.951 > α = 0.05, meaning that there was influence of learning model toward the students' Physics problem solving ability. The average scores of the students' Physics problem solving ability with concrete sequential thinking style, abstract sequential, concrete random, and abstract random consecutively were 79.78, 85.45, 76.57, and 80.74. The result of inferential statistics analysis showed that the significant score was 0.000 < α = 0.05, meaning that there was influence of thinking style toward the students' Physics problem solving ability. The result of inferential statistical analysis showed the significant score of learning model and thinking style was 0.013 < α = 0.05, meaning that there was interaction between learning model and thinking style in influencing the students Physics problem solving ability.

Keywords: Learning Model, Problem Solving, Thinking Style.

Introduction

In the 21st century, education required to produce students who have excellent problem-solving ability. Problems can be encountered in all aspects of life. For example, students are faced with problems or questions to be resolved at the school. The task of finding solutions to problems whose solutions have not been known to be a problem. Educational paradigm of the 21st century are now demanding world of education to produce output that is armed with the ability to solve problems (Pacific Policy Research Center, 2010). Many complex problems in life that requires learners to improve their ability to solve problems. Based on this, problem-solving ability is essential for students to be developed through learning.

Based on the facts, the quality of education in Indonesia remains a serious problem which continues to look for

solutions to solve them. The survey results Political and Economic Risk Consultancy (PERC) in 2014 showed that Indonesia was ranked 83rd out of 144 countries in terms of the quality of education (WEF, 2014). Furthermore, the results of research conducted by the Organization for Economic Co-operation and Development (OECD) which is an international research institutions through program PISA (Program for International Student Assessment) in 2009, putting learners Indonesia is ranked second from the bottom on the quality problem-solving competence of the countries in the world. Indonesia only beat Tunisia in terms of quality problem solving competence (Chatib, 2012). In scientific literacy in 2012, Indonesia ranks 60 of 61 countries surveyed (OECD, 2014). Its means that the problem solving ability of students in Indonesia is still low. Therefore, we need a model that fosters learning problem solving skills of learners.

There are several models of learning that can foster problem-solving ability of students, such as problem based learning and inquiry learning model. Problem-based learning model associated with the use of intelligence from within the individual who is in a group or environment to solve the problem of meaningful, relevant, and contextual. Margetson in Rusman (2010) stated that the problem based learning helps learners to enhance the development of skills for lifelong learning in a mindset that is open, reflective, critical, and active learning, as well as facilitating the success of problem solving, communication, teamwork and interpersonal skills better than the other models. Meanwhile, inquiry learning model is a series of learning activities that emphasize the process of critical thinking and analysis to look for and find their own answer to the problem in question (Sanjaya, 2006).

Based on the results of previous research conducted by the Goddess (2014), Klegeris (2011), and Widjajanti (2009) concludes that the use of problem-based learning model can improve problem-solving abilities of learners. As well as with the results of research conducted by Sulityowati (2012) and Risdianto (2013) which gives the conclusion that the use of inquiry-based learning model can also improve problem-solving abilities of learners. Both this model together provide a platform for students to develop problem-solving abilities. Therefore, this study will assess the effectiveness of the comparison of the two models of teaching and learning.

Furthermore, every student has a style of thinking that vary across in learning. Style thinks is the way of person to manage and organize information obtained by learning style. The products of the thinking styles in the form of intelligence is also different for each other. This intelligence is largely determined by one's habits to regulate and manage the information obtained (Bancong & Subaer, 2015). Gregorc (1982) classifies a person's thinking style into four groups: Concrete Sequential thinking style (CS), Abstract Sequential (AS), Concrete Random (CR) and Abstract Random (AR). The fourth of thinking style is owned by every learner but generally dominant learners to use one. The different of thinking style of learners should be considered in the study. Educators should not create a teaching environment that was dominant in the one of thinking style. But, educators should create a learning environment by providing support for variety of style of thinking

learners. So that learners feel happy with the presence of their thinking style environment and trying to adapt to the environment of other thinking styles (Bancong & Subaer, 2013).

Based on the above issues, this research will examine not only the influence of the learning model but also the influence of thinking style and its interaction with the learning model towards problem solving skills of learners. Thus, the formulation of the problem in this research are

1. Is there influence of learning model toward physics problem-solving ability of students in class XI IPA SMAN 22 Makassar?
2. Is there influence of thinking style toward physics problem-solving ability of students in class XI IPA SMAN 22 Makassar?
3. Is there an interaction between learning model and thinking style in influencing physics problem-solving ability of the students in class XI IPA SMAN 22 Makassar?

Research Methods

1. Type and Variable Research

This research is a quasi-experimental research conducted in SMAN 22 Makassar in the academic year 2014/2015. The variables in this study consists of three variables: the independent variable (problem-based learning model and inquiry learning model), the moderator variable (thinking style of CS, AS, CR and AR), and the dependent variable (physics problem-solving abilities).

2. Research Design

The design used in this study is a 2 by 4 factorial design as shown in Table 1 as follows:

Table 1. 2 x 4 factorial design

A	**B**			
	B_1	**B_2**	**B_3**	**B_4**
A_1	μ_{A1B1}	μ_{A1B2}	μ_{A1B3}	μ_{A1B4}
A_2	μ_{A2B1}	μ_{A2B2}	μ_{A2B3}	μ_{A2B4}

(Fraenkel & Wallen, 2009).

Description:
A = The treatment, in this case is a learning model
A1 = Problem-based learning model
A2 = Inquiry learning model
B = Thinking style
B1 = Thinking style of CS
B2 = Thinking style of AS
B3 = Thinking style of CR
B4 = Thinking style of AR
μ = Physics problems-solving ability

3. Population and Sample

The population in this study were students of class XI IPA at SMAN 22 Makassar in academic year 2014/2015, amounting to 4 classes with a number of students 160 people were spread randomly without grouped by ranking. Then, the class selected as a sample is a class XI IPA 1 totaling 41 people as the first class taught by problem based learning model and class XI IPA 4 totaling 43 people as second class taught by inquiry learning model selected by simple random sampling.

4. Research Instruments

This study uses some instruments which are: questionnaire - thinking style, physics problem solving ability test and observation sheet enforceability of teaching model.

5. Data analysis technique

Analyzed using descriptive statistics and inferential statistical analysis. Descriptive statistical analysis includes the value of the average (mean), median, standard deviation, the highest score and the lowest and others.

For the inferential analysis covering the prerequisite test is a test of normality (using analysis One- Sample- Kolmogorov-Smirnov Test) and homogeneity (One-Way ANOVA analysis).

Statistical hypothesis in this study are as follows:

Hypothesis I:

H0: $\mu A1 = \mu A2$

H1: $\mu A1 \neq \mu A2$

Hypothesis II:

H0: $\mu B1 = \mu B2 = \mu B3 = \mu B4$

H1: one marked ≠

Hypothesis III:

H0: $(\mu A1B1 - \mu A2B1) = (\mu A1B2 - \mu A2B2) = (\mu A1B3 - \mu A2B3) = (\mu A1B4 - \mu A2B4)$

H1: one marked ≠

Results and Discussion

Data descriptions of physics problem-solving skills of learners based on learning model shown in following table 2:

Table 2. Statistical Physics Problem Solving Ability of Students Based on Learning Model

Statistic	Physics Problem Solving Ability of Students	
	Problem based learning	Inquiry
N	41	43
The maximum value	89,29	91,43
The minimum value	68,57	68,57
Mean	80,80	80,79
Median	80,71	81,43
Variants	17,53	22,49
Standard deviation	4,19	4,74
Range	20,72	22,86

In Table 2 shows that the differences of physics problem solving ability of students taught by problem-based learning model with inquiry learning model is very small (0.01). In other words, there are no differences of physics problem-solving ability of students taught by problem based learning with inquiry learning model.

Furthermore, the data description of physics problem-solving ability of students based on the style of thinking presented in Table 3:

Table 3. Statistical Physics Problem Solving Ability of Students Based on Thinking Style

Statistic	Physics Problem Solving Ability of Students			
	CS	AS	CR	AR
N	23	19	15	27
The maximum value	85,00	91,43	83,57	87,14
The minimum value	68,57	82,14	69,29	68,57
Mean	79,78	85,45	76,57	80,74

Median	80,00	85,00	76,43	80,71
Variants	15,19	5,46	12,40	12,97
standard deviation	3,89	2,34	3,52	3,60
Range	16,43	9,29	14,28	18,57

The table 3 shows that the average value of physics problem-solving abilities of learners with thinking style of CS, AS, CR and AR are 79.78; 85.45; 76.57; and 70.74 respectively. The data showed that students with thinking style of AS has the highest of the average value of physics problem-solving abilities compared with three styles of thinking. On the other hands, students with thinking style of CR has the lowest of the average value of physics problem-solving abilities compared with the other thinking style.

Descriptive analysis of the interaction between the learning model and style of thinking to a physics problem-solving ability of students shown in Table 4 below

Table 4. Statistics problem solving ability of students to each style of thinking on the learning model

Learning Model	**Thinking style**				**Total**
	CS	AS	CR	AR	
Problem based learning	78,12	84,76	77,86	81,84	80,80
Inquiry	81,31	86,07	75,45	79,56	80,79
Total	79,78	85,45	76,57	80,74	80,80

Table 4 shows that the average value of physics problem-solving abilities in the classes using problem-based learning model is roughly equal to the class taught by inquiry learning model. The average value of problem-solving ability of students using problem-based learning model accounting for 80.80 while the students taught using inquiry learning model amounting to 80.79. Furthermore, the average value of physics problem-solving abilities of students based on thinking style in the inquiry class and problem-based class are equally shown that learners with thinking style of AS is higher than learners with thinking style of CS, CR and AR.

If the views of the average value of problem-solving abilities of physics students based on thinking style in the learning model, the results showed that in a class taught by learning model inquiry, the average value of students with thinking styles of CR and AR are lower than the student taught by problem-based learning model. But for student with thinking style of CS and AS have the value of problem-solving ability that higher than the student taught by problem-based learning model.

Based on the analysis of normality test by using analysis One-Sample Kolmogorov-Smirnov Test obtained significance value of 0.200 with a degree of freedom (df) 41. This indicates that the significance > α = 0.05, meaning that H0 is accepted while H1 is rejected. It can be concluded that the data of physics problem-solving ability of students in a class taught by problem based learning model derived from normally distributed population. In the meantime, the results of data normality test of physics problem-solving abilities in the classes taught by the inquiry learning model obtained significance value of 0.114 with a degree of

freedom (df) 43. This indicates that the significance > α = 0.05, meaning that H0 is accepted while H1 is rejected. Therefore we can conclude that the data of physics problem-solving ability of students in a class taught by guided inquiry learning model derived of normal distributed population.

The results of homogeneity test using One - Way ANOVA analysis obtained significance value account for 0.617 with an F-count is 0,253. This shows that the significance > α = 0.05, meaning that H0 is accepted while H1 is rejected. It can be concluded that the data of physics problem-solving ability of students in a class taught by problem based learning and inquiry learning model is derived from a homogeneous population.

The first hypothesis test results with analysis using the analysis of General Linear Model (GLM) – Univariate Fixed Factor demonstrate that the significant value of learning model amounting to 0.951 that is greater than α = 0.05 with F-count value of 0.004. This means that H0 is accepted while H1 is rejected so it can be concluded that there is no influence on the teaching model of physics problem-solving skills of students. Because there is not significant differences of physics problem-solving ability of students taught by problem-based learning model and inquiry learning model, so it can be concluded that the learning model does not affect to the physics problem-solving skills of students.

The second hypothesis test results using the analysis of General Linear Model (GLM) - Univariate Fixed Factor shows that the significance of the thinking styles amounting to 0.000 which is smaller than α = 0.05 with F-count value of 21.257. This means that H0 is rejected while H1 is accepted so it can be concluded that there are influence of thinking style to physics problem-solving abilities of students. Because there are significant differences between the physics problem-solving ability of students who have thinking style of CS, AS, CR and AR so we can conclude that the thinking styles affect the physics problem-solving ability of students.

The third hypothesis test results with analysis of the General Linear Model (GLM) - Univariate Fixed Factor demonstrate that the significant value of learning models * thinking styles amounting to 0.013 which is smaller than α = 0.05 with the F-count equal to 3.806. This means that H0 is rejected while H1 is accepted so we can conclude that there is an interaction between the learning model and style of thinking in influencing the physics problem-solving abilities of students.

The results of the above analysis shows that the interaction between the learning model of problem-based and inquiry with the style of thinking can influence the physics problem-solving abilities of students. The third hypothesis can also be explained by the graph shown in Figure 1 below:

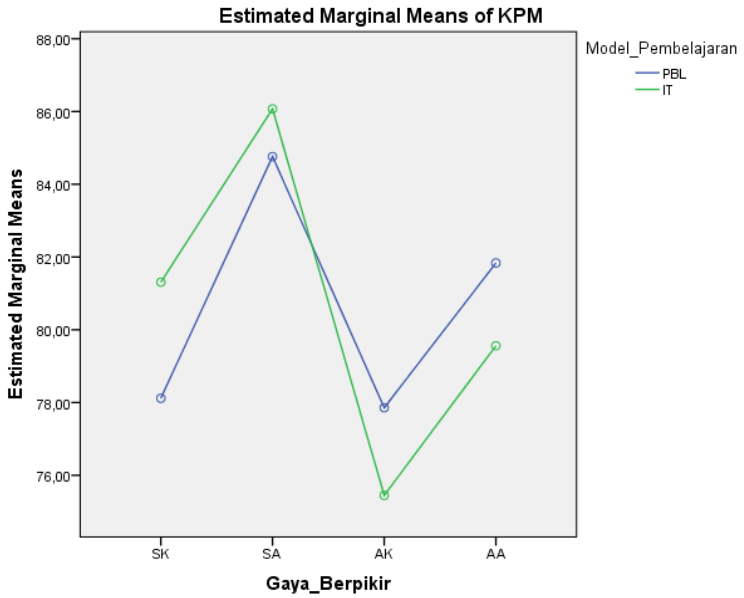

Figure 1. Graph Interaction Thinking Style and Learning Model toward Physics Problem Solving Ability of Students.

Figure 1 shows that there are intersection of the lines so concluded that there is a difference between physics problem-solving ability of students to the thinking styles of CS, AS, CR and AR taught by problem based learning model with inquiry learning model. Because of the significant difference in the value it can be concluded that there is an interaction between the learning model and style of thinking in influencing the physics problem-solving abilities of students.

Conclusion

1. There is not an influence of learning model towards physics problem-solving ability of students in class XI IPA SMAN 22 Makassar.
2. There is an influence of thinking style toward physics problem-solving ability of students in class XI IPA SMAN 22 Makassar
3. There is an interaction between the learning model and style of thinking to influencing physics problem-solving ability of students in class XI IPA SMAN 22 Makassar.

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Developing Activity-Based Assessment Device to Improve the Process Skill of Physics Experiment

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ABSTRACT

This research is categorized as research and development. The instrument development research was conducted to answer the second research question. Development procedures used in this study refer to the 4-D models proposed by Thiagarajan to answer the first research question. The assessment device developed in this study includes: the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, and the assessment instrument of practicum report and practicum result presentation of Fundamental Physics I. This study aims to determine the development procedure and the form / format of activity- based assessment device in the practicum subject of Fundamental Physics 1 which can improve the process skills of physics experiments for students in the practicum subject of Fundamental Physics 1. Basically the stage of instrument development covers three main steps, namely need analysis, instrument design and development and validation including trials, revision and instrument validation. The evaluation system (assessment) in the practicum subject of Fundamental Physics 1 was a four-stage (four-D models), namely: Define, Design, Develop and Disseminate. The forms of activity-based assessment device were the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, the assessment instrument of practicum report and practicum result presentation. Based on the analysis result, the assessment instrument device (Activity-Based Assessment) on the subject of Fundamental Physics I for the topic of motion, friction force, simple harmonic motion, and refraction can improve the experiment process skill of students.
Keywords: activity-based assessment physics experiment.

Introduction

The increasingly rapid development of science and technology was supported by the development of physics, either theoretically or experimentally modified. Therefore, teachers of physics are always required to teach physics through appropriate methods and approaches. One indicator of the appropriate methods and approaches used in teaching physics is if the learners during the learning process get more active and creative. Activity and creativity of learners can be easily observed through practical activities in the laboratory.

Muhammadiyah University of Makassar, has opened Physics Education study program since 2006. One of the compulsory subjects in the study program of Physics Education is Fundamental Physics I. Fundamental Physics I is conducted through classroom teaching and laboratory experiments. Practical activities aimed to improve students understanding of physics concepts accurately and quickly. Thus, the lecturer in charge of this subject is required to design integrated practicum activities and assessment process.

Lecturers and laboratory assistants have a responsibility to provide evaluation results of practicum activity on fundamental physics I. The lecturers often only take an assessment based on the results of lab reports made by students, for the practicum subject of Fundamental Physics I is followed by a large class. If this system continues then the degree of students' ability to process physics experiment cannot be measured so that it will reduce the quality of student skills in the field of experimental physics. Thus the innovation effort was needed in the Physics Education study program especially on the practicum subjects of Fundamental Physics I.

The evaluations of learning outcomes in the learning of science physics are more accurately understood as an assessment. Assessment is more appropriate because it is in line with the nature of science as a process, product, and value, thus what was measured not only learning outcomes but also the learning process.

Basically the evaluation of the practicum is an inseparable part of teaching and learning. One of the drawbacks from that conventional evaluation tools was only to measure a small part of the entire capabilities of the students, which is only the cognitive abilities with the level of memory, comprehension, application, analysis, synthesis, and evaluation. Consequently, the evaluation which is seen as a benchmark for the success of student learning is biased namely less measure than what should be measured.

Based on the data obtained by the researcher, that the score of Fundamental Physics I for students of Physics Education, Muhammadiyah University of Makassar (Unismuh) is low. The practicum scores for student class of 2006 had an average of 68.19 whereas the class of 2007 only 67.71. From the results of the midterm and final exams, then combined with the score of practicum (report) which is managed into the final score, the data for the first semester students class of 2006 numbered 133 people consisting of three classes only 28 people get the score of 80.00 upwards (score A) or 21 percent. While the students of 2007 of 155 people consisting of three classes only 46 people scored 80.00 upwards (score A) or 29.7 percent.

The data indicates that the students' skills of Physics Education Study Program in Muhammadiyah University of Makassar (Unismuh) are still low and an estimated one cause of this is due to the assessment made at the lab was not structured. But what is very important to do now is to develop activity-based assessment device procedure, as well as to train the lecturers and assistant to a valuation model that is expected to support the increase of students' scores. Because basically the task of the lecturers is not just seeking students to acquire a wide range of product knowledge and skills, but also the most important is how lecturers give ratings to appreciate student activities.

From observation and experience of researchers on the subject of Fundamental Physics I, the assessment process which was undertaken merely emphasized the mastery of concepts that netted with a written test and practical reports objectively and subjectively as a means of measurement. This is supported by the research of Nuryani, et al (2007) who argued that the tests performed during this measure only the procurement of material and then only include the low level of cognitive domains. Such circumstances are one cause of the

lecturers to be reluctant to perform the learning activities that focus on developing process skill of students.

Lecturers of Physics, Muhammadiyah University Makassar are aware of the low score of the students in the subject of Fundamental Physics I. Therefore, the lecturers of physics need to find solutions as an effort to improve the skills of students. The lecturers and researchers must have the assessment instruments to assess the work and all the activities of students. This assessment is believed to be an effective approach in improving the skills of the students.

Based on the circumstances as mentioned above, it needs an activity-based assessment instrument (assessment) that can measure the skill level of students in the practicum Fundamental Physics I. This assessment can help the lecturers of practicum subject fundamental Physics I to measure students' skills in a structured way. Assessment that uses activity-based instruments will also be able to identify which aspects needed to be improved in the practicum process.

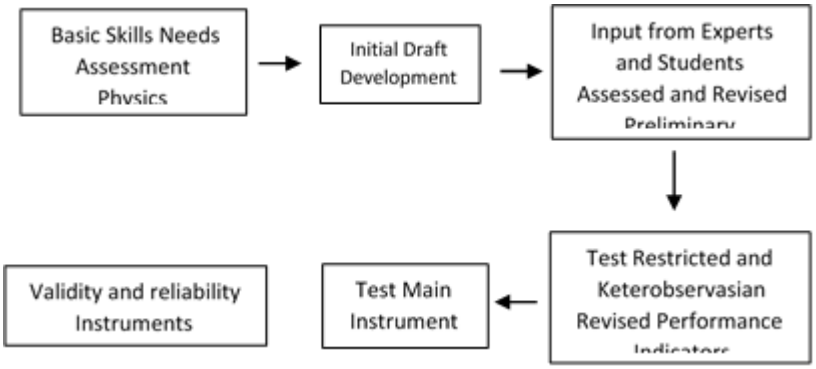
Assessment is an effective device to communicate the purpose of science education system which is entirely concerned (focused) on science education.

Therefore there is a demand to develop an assessment format that can reach all practicum activities. It is believed that this format would solve the problem of students' low skills of Physics Education, Muhammadiyah University of Makassar. The activity was conducted through development research (Research and Development) entitled "Developing Activity-Based Assessment Device to Improve the experiment process skill of Students on the Subject of Fundamental Physics I.

Research Method

Based on the research questions, this research is categorized as research and development, Instrument development research was conducted to answer the research question. Development procedures used in this study refers to the 4-D models proposed by Thiagarajan to answer the first question. Assessment tools developed in this study include: the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, and the assessment instrument of practicum report and practicum result presentation of Fundamental Physics I.

This study aims to determine the development procedure and form / format of the Activity-Based Assessment in the practicum subject of Fundamental Physics I which can improve the process skills of physics experiments for students in the practicum subject of fundamental Physics I. Basically stage of development the instrument is covering three steps namely need analysis, design and development of instruments and validation which includes testing, revision and validation of the instrument, according to the picture that is presented as follows:



In this study, the model used is a 4-D model of Thiagarajan which has been adapted. The adaptations by the researcher are as follows:

1. In the first stage, the intended task analysis in this research is the analysis of the basic practicum skills possessed by the student.
2. In the second stage, there is the preparation of a benchmark reference test (achievement test). In this study, the test is meant to be cognitive tests and tests of student performance. Because the practicum test is an instrument that will be developed so that the test preparation steps are omitted.
3. In the fourth stage of 4-D model, the thing to do is the deployment of the device as a whole. But in this study, it is only limited to socialization.

Therefore, the evaluation system (assessment) in the practicum subject of Fundamental Physics I developed is a four stage (Four-D models), namely: Define, Design, Develop and Disseminate, Thiagarajan (1974: 9).

Data collection instruments include the validation sheet used to obtain data on the validation results of experts on the assessment instrument of pre-lab activity, assessment instrument of practicum activity and assessment instruments of practicum report and assessment instrument of practicum result presentation on Fundamental Physics I. Validator was asked to write a score by marking checklist (√) on the line and the appropriate column, then the validator was asked to give a conclusion for the overall assessment of the assessment instruments of the pre-lab activity, assessment instrument of practicum activity and assessment instruments of practicum report and assessment instrument of practicum result presentation and write criteria TR (used without revision), RK (used with minor revisions), BR (used with many revisions), and PK (unusable or replace).

The initial data were collected through the provision of student learning tests. Tests were administered before the practicum takes place (response). The performance test was given to an observer or assistant to be filled by writing the score based on the circumstances observed by the students in doing the skills of fundamental physics using a rubric. The performance test used in this study consisted of three, namely: (1) practicum performance test, (2) performance test report, (3) presentation performance test. This questionnaire was made with the aim to evaluate the assistant response / responses to the Activity-Based Assessment which has been used. Aspects that were responded was the language, systematics, benefits, and suitability of time. The assistant

questionnaire responses were also expected to be in the presence of this questionnaire, the assistant can give suggestions on the four instrument devices.

This questionnaire was given to a laboratory assistant after all experiment topics have been practiced and filled in accordance with the instructions provided. Student questionnaire responses were made with the aim to evaluate the student response / feedback (practitioner) on the implementation of a whole series of practical start from the pre lab activity (response), practicum process, practicum report, and the practicum result presentation with guidelines for assessment used by the laboratory assistant. This questionnaire was given to the practitioner after all the experiment topics have been practiced, made into a report, and the result presented. Questionnaires were filled in accordance with the instructions provided.

Results and Discussion

Description of Definition Phase (Define)
Analysis of the open-ended

Practicum assessment process based solely on cognitive abilities and judgment of the final report. In a whole series of practicum, students are only given the response by the assistant without holding a scoring guide, making it difficult to judge right or wrong answers. During the process of ongoing practicum, the assistants need to provide guidance to the practitioner without paying attention to their ability to move. In addition, an assessment of the practitioner's ability to communicate the practicum result also does not exist.

Based on its review, it is needed an alternative assessment instrument and activity -based practicum which can increase the process skills of students. Alternative Practicum offered an alternative assessment instrument which is activity -based assessment instruments along with cooperative setting. Because the assessment instruments used at the Muhammadiyah University of Makassar particularly on Physics Education Study Program is not adequate to carry out the assessment of alternative instruments, it is necessary to develop an appropriate assessment device and support the practical implementation of Fundamental Physics I. The assessment instrument device developed was namely the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, the assessment instrument of practicum report and practicum result presentation.

Student Analysis

Students have never done the practicum by following an assessment instrument format of lecturers and assistants. So the activity -based assessment (Activity-Based Assessment) is new for the students, especially students of Physics Education Class A year 2008, who programmed the practicum subject of Fundamental Physics I.

Task Analysis

The main skills that must be possessed by students in the trials for the motion, the friction force, simple harmonic motion, and refraction are: drawing, measuring, counting, and assembling tools.

Material Analysis

Material analysis was done by identifying, detailing, and systematically compiling the main parts of practicum for each trial topic of the subject on fundamental Physics I. It is based on the guiding practicum Fundamental Physics I

used at Muhammadiyah University of Makassar academic year 2008/2009.

Formulation of learning goals

The purpose of the study (practicum) is performed to convert the task analysis and material analysis into specific learning objectives expressed in behavior. The arrangement of learning objectives (practicum) is based on experimental purposes as stated in the guiding practicum Fundamental Physics I.

Process objectives are students able to: 1) choose tools 2) string tools; 3) operate the measuring instrument; 4) select appropriate data collection method; 5) observe the variables studied; 6) perform measurement and record data; 7) create tables; 8) active in data collection; 9) clear tools and materials; 10) make an interim report.

From the results of practicum purposes, cognitive tests (response) are conducted including practicum performance test, performance report test, and presentation performance test on topics of motion, friction force, simple harmonic motion, and refraction.

Description Results of Design Stage (Design)
Selection of media

Media which are required in the implementation of activity-based assessment) in class A Physics Education Study Program for each topic are:

1. Motion: ruler, stopwatch, position markers.
2. Friction: wooden beams, hooks, yarn, balance springs, pulley table, grounding.
3. Simple harmonic motion: stopwatch, 50 g load, thread, ruler.
4. Refraction: protractor, pin, HVS, a foundation board.

The supporting Media used for the whole series of practicum start from the response, the practicum process, preparing reports and presenting are pens, pencils, laptops, and LCD.

Format Selection

Cognitive test instrument format used was based on the guiding practicum Fundamental Physics I 2008/2009 academic year. Indicator and items are listed in such instruments. The items refer to the results of the material analysis, the result of task analysis, and specification of indicators which have been formulated in the definition phase. Strategy for a whole series of lab that will be used, such as students actively participating in the response, performing experiments, creating reports, and presenting experimental results. Before doing the whole series, at first assistant should give a scoring guide.

Assessment instrument sources that will be developed consist of an the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, the assessment instrument of practicum report and practicum result presentation of Fundamental Physics 1.

The Initial Design of the Assessment Instrument Device

In this step, four (4) cognitive tests are produced for the material of movement, the friction force, simple harmonic motion, and refraction. While the performance tests are produced each 1 (one) namely the practical performance test, report performance test, and presentation performance test that include the materials for four trials. Cognitive tests only measure the shape of the description and the cognitive abilities of students, while the performance tests measure skills or psychomotor of the students.

Result Description of Development Phase (Develop)

Results of expert validation

One of the main criteria used to determine whether or not a device will be used is the result of the validation assessment by experts. Activity-Based Assessment device is an assessment instrument of the pre-lab activity, the assessment instrument of practicum activity, the assessment instrument of practicum report and practicum result presentation of Fundamental Physics 1. The material or topics assessed consists of four topics, namely motion, friction force, motion simple harmonic, and refraction.

The pre-lab assessment instrument

The aspects that are considered in validating the pre-lab assessment instrument or cognitive tests to 4 (four topics) are: material for the question items, construction, language, and time. Based on the analysis result annex 13 shows that (1) the overall assessment devices of cognitive tests are rated good, (2) the assessments of cognitive tests are relatively reliable because all reliability scores for each cognitive test are above 75%, in accordance with the terms of reliability (Borich in Khaeruddin, 2003: 66). Validator also concluded that the assessment instrument of pre-lab activity can be used with minor revisions.

Practicum Activity Assessment Instruments, Reports and Practicum Results Presentation

The aspects considered in validating the practicum activity assessment instrument, reports, and practicum result presentation are the instrument format, the assessment instrument content, languages, and time. Detailed results of the analysis are in Annex 14, 15 and 16. Below is a recapitulation of the third analysis of the assessment instruments.

Assessment Instrument	Score	Category
Practicum	88.89	**Reliable**
Report	88.89	**Reliable**
Presentation	**88.89**	**Reliable**

From the analysis above, it is shown that (1) the overall assessment instrument device are rated as good, (2) the device is classified as reliable assessment instrument because all reliability scores for each activity are above 75% (in accordance with the terms of reliability). Especially for practicum activity assessment instrument, the validator concluded that such devices can be used without revision. While the assessment instrument reports and presentations can be used with minor revisions.

Simulations

Researchers conducted a simulation on Friday, March 6, 2009 in Physics Laboratory Muhammadiyah University of Makassar. The purpose of the simulation is to determine the enforceability of assessment instruments that have been prepared in draft form II. In addition, it was expected that the simulation can reduce the difficulties faced by assistants in using the assessment instrument at the time of trial. The simulation was conducted by researchers and 8 (eight) assistants by holding the assessment guidelines and practical response. Students consists of 10 people (2 groups) that acts as a practitioner.

Analysis of the data obtained based on simulation results (annex 31 and 32) shows that the average value of assistance given to

the practitioner is relatively the same (annex 31 and 32). Therefore, the ratings continued to the stage of field trials.

Analysis of the Trial Results

Trial 1 conducted by researchers and 8 laboratory assistants took place from March 10th 2009 until March 21st, 2009. There are two (2) experiment topics that were tested first namely motion and friction force.

The implementation details of the trial based on a meeting time (day / date / year) for assessment instrument of pre-lab activity, assessment instrument of practicum activity, assessment instrument of practicum report, the assessment instrument of the practicum result presentation on Fundamental Physics I.

Students observed consist of 44 people, divided into nine (9) groups. Based on trial results I, revisions were made to enhance Draft II before being used for the second trial.

The II trial conducted by researchers and 8 laboratory assistants which took place from March 30 2009 until April 9, 2009. There are two (2) topics of experiment tested namely simple harmonic motion and refraction.

The implementation details of the trial based on a meeting time (day / date / year) for assessment instrument of pre-lab activity, assessment instrument of practicum activity, assessment instrument of practicum report, the assessment instrument of the practicum result presentation on Fundamental Physics I.

The assessment instrument device in the form of an assessment instrument of the pre-lab activity, assessment instrument of practicum activity and assessment instruments of practicum report and assessment instrument of result presentation were tested to determine the increase of students' process skills.

There are six types of data collected in the implementation of the test, namely: Data of cognitive test results, data of practicum result test, data of practicum report test, and data of result presentation test, data of assistant response result, and data of student response outcome (the practitioner).

Description of Dissemination Result (Disseminate)

Draft III which is produced can be categorized as a good assessment device and ready to be limitedly socialized in the area of Muhammadiyah University of Makassar, because it has been through the expert validation phase, stage of revisions based on suggestions and comments from validators, test phase, and the phase of revision based on data analysis and observations made during the trial also taken into account the suggestions and opinions of the assistants involved in the study.

Socialization entire device is held on Sunday April 12, 2009. The implementation of socialization followed by the entire lab assistant who served in Physics Education Study Program. After that, the researchers together the assistants do the sharing to evaluate the instruments that have been used. The result, some advices were obtained from the assistant, among others, the pre-lab assessment instrument (cognitive tests) should be given a long time so that the learners can answer correctly, the practicum preparation should be really prepared in the laboratory, because the report assessment instrument has been prepared so that it is better that all assistants check and restore practitioner statements within the allotted time.

In general the results of sharing, the

input of the proposed format of assessment to be made more efficient. An assessment instrument must be designed to be used for any meetings during a semester. This is because the instruments used during the research can only be used for one meeting in particular pre-lab assessment instrument.

Dissemination results, in the form of suggestions above are then used to enhance the third draft into the final draft as the ultimate development of the device.

Discussion of Research Results

Through the repeating process until the trial II, finally assessment instruments for lectures in Fundamental Physics I are successfully developed and considered capable of expressing all components in practicum activities. Practicum activities as a science experiment, of course, have to develop all phases of scientific method. Therefore, all activities of students in the practicum lecture process must be respected. So that at least four assessment instruments should be developed to assess the overall activity of the lab, namely: 1) Pre-lab, 2) Practicum Activity, 3) Practicum Reports, 4) Presentation Event, through a series of cyclical activity, this research has successfully developed the four assessment instruments.

Assessment of the Pre-lab Activity

Pre-lab activity contain pre-test activities. This activity is performed to measure the ability of students before lab work done.

In addition, this event is also used to see the extent of readiness of students to carry out practical work. Thus, a number of indicators should be disclosed in this activity. Therefore, the pre-lab assessment instrument should at least be able to reveal the students' ability in terms of:

1. knowledge on concepts or theories relating to the trial,
2. Knowledge on experiment purpose to be performed,
3. The understanding on variables that play a role in the trial, both the independent variable, dependent, or control (if any),
4. Knowledge on an experimental procedure in outline,
5. Knowledge on the use of mathematical equations.

Practicum Activity Assessment

Practicum activity is a core activity in the practicum subject of Fundamental Physics I. A number of indicators should be shown by the students during the practicum. The assessment instrument of practicum activities should at least reveal the ability of students in terms of:

1. the ability to select tools/equipment,
2. Stringing the tool/equipment,
3. Operating the measuring instrument,
4. The accuracy of selecting data collection method
5. Observation on the variables studied,
6. Accuracy in measurements and data recording,
7. The ability to make the tabulation of experimental data,
8. The Practical activeness in data retrieval,
9. The tidiness of tools and materials, and
10. The interim report writing.

Practicum report Assessment

1. The practicum report is one of the media to communicate the results of scientific activity (in this case the practicum) to the other party. Thus the report should describe the correct information in accordance with the results of the experiment.

2. The assessment instruments of practicum reports should reveal the ability of students in terms of: making background, formulating problems, experimental purposes, a literature review, formulating hypotheses, tools and materials, working procedures / experimental design, identification of variables, the operational definition of variables, data analysis techniques, creating tables of experimental results, creating graphics, data analysis, discussion, making inferences, suggestions, and bibliography.

Assessment of Practicum Result Presentation

1. Presentation of the lab is also a medium to communicate the results of scientific activity (in this case the lab) to the other party. Thus the presentation must describe the correct information in accordance with the results of the experiment.
2. The assessment instruments of practicum result presentation should at least disclose the ability of students in terms of mastery of the material, the type of media used, the ability to use media, communication skills, and clarity of presentation materials, ability to answer problems that arise, and teamwork.

Conclusions

1. The procedure development of the Activity-Based Assessment in the practicum subject of Fundamental Physics I consists on Defines (definition), Design (design), Develop (development), and Disseminate (limited socialization).
2. The form of Activity-Based Assessment is the assessment instrument of pre-lab activity, the assessment instrument of practicum activity, the assessment instrument of practicum report and practicum result presentation. Such assessment devices have been through stages namely (1) validation expert, (2) revision based on assessment, suggestions, and validator comments, (3) trial court, and (4) revision based on data analysis of the trial, as well as advice from result sharing with assistant laboratory. Furthermore, the assessment device is appropriate to be used in a limited socialization.
3. Based on the analysis result, the assessment instruments device (Activity-Based Assessment) on practicum subject of fundamental Physics I for the topic of motion, friction force, simple harmonic motion, and refraction experiment process can improve the skills of students.

Suggestion

Based on the research results, it can be recommended:

1. That the lecturers of practicum subjects and laboratory assistants can use the Activity-Based Assessment that has been generated in this study.
2. That the major institutions should be able to pursue the procurement of the Activity-Based Assessment as an integral part with a practicum guide book.

Due to this study has produced the Activity-Based Assessment device on the practicum subject of Fundamental Physics 1, the researchers in the field of education are expected to conduct instrument development research on the practicum subject of Fundamental Physics II.

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Implementation Blended Learning Strategies to Physics Learning Outcomes SMKN 1 South Sulawesi

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ABSTRACT

This research was pre-experimental research aimed to: (1) know the physics learning outcomes of students of Class X TKJ 2 SMK 1 South Sulawesi taught using Blended Learning Strategies, (2) whether the results of studying physics has reached KKM 65% in class X TKJ2 SMK 1 South Sulawesi after the implementation Blended Learning Strategies. The design used in this research is the one shot case study design with two variables consisting of the dependent variable and independent variables. The dependent variable is physics learning outcomes and independent variables is implementation Blended Learning Strategies. The subjects research on TKJ2 x Class at SMK 1 South Sulawesi with 25 students. The instrument using this research is the physics learning outcomes test. Results of descriptive statistical analysis revealed that average value of the physics learning outcomes in TKJ2 X Class at SMK 1 South Sulawesi is 70, 80 with medium category and the physics learning outcomes TKJ2 X class at SMK 1 South Sulawesi has reached standard criteria (KKM).

Keywords: Blended Learning Strategies, and physics learning outcomes.

Introduction

Physics as one of the basic science, are taught at every level of education, and in the learning process requires specific skills that can lead students to focus their attention fully on the lessons. Therefore, teachers as a profession requires a wide range of abilities and skills. Minimal mastery of the subject matter and teach skills. Thus a professional teacher in carrying out their teaching duties should be able to apply various teaching models effectively and efficiently, so that the learning objectives can be achieved optimally.

One of the problems faced by teachers in physics learning where outcomes learning is still low. This is because learning is done is teacher centered. Now, the development of technology so rapidly, especially in the Information and Communication Technology (ICT). Information is now accessible everywhere by using of the Information and Communication Technology. The influence of ICT in education even more so because of the presence of ICT learning pattern is slightly different. From the conventional face-to-face learning or plain toward the open education. And with the technology that could remotely, in the present study was there through distance learning or e-learning by using Internet network. Distance learning is learning with not face-to-face, and without any direct interaction between teachers and learners.

The learning process is directed to realize the competencies specified in the curriculum. Learning by using the internet or by distance learning is not a mainstay in learning will not direct interaction teachers and students. In Teaching and Learning,

face-to-face learning or Conventional learning is not best learning process in schools and universities in Indonesia. But, face-to-face learning to make students tired and less active. Actually, we need to be changed paradigm for learning towards student centered learning, and we can choose one of the strategies learning is blended learning strategies. Blended learning is learning that combines face-to-face learning with online learning. According to Rahayu and Nuryata (2010) in Hermawanto (2012: 68) that blended learning combining conventional educational methods (face to face) with learning supported by the information and communication technology. And with this problem, I was interested research by "Implementation Blended Learning Strategies to Physics Learning Outcomes in SMKN 1 South Sulawesi".

Method

This research was pre-experimental research, and subjects' research in TKJ2 X Class SMK 1 South Sulawesi with 25 students. The design used in this research is the one shot case study design with two variables consisting of the dependent variable and independent variables. The dependent variable is physics learning outcomes and independent variables by implementation Blended Learning Strategies.

The Design Research is the one shot case study, like that:

X	O

Description:

X: Blended Learning Strategies
O: Physics learning outcomes

Date collection techniques in this research carried out after the implementation of the learning process and the continuation of physics learning outcomes test to measure mastery of learners of the subject matter that has been taught in TKJ2 X class SMK 1 South Sulawesi, using Blended Learning Strategies. In the collection of date on the variables examined in this research used the instrument, in the form of test student learning outcomes with objective test (multiple choice) for testing physics learning outcomes, which will be tested before being used in research to determine validity and reliability tests.

The validity of item tests were performed using:

$$\gamma_{pb_i} = \frac{M_p - M_t}{S_t}\sqrt{\frac{p}{q}}$$

Valid or not valid is determined by comparing the value of γ_{pbi}(i) and the value r_{table} at significant level a = 0.05 with the following criteria:

1. γ_{pbi} If the value (i) $\geq r_{table}$, is valid
2. γ_{pbi} If the value (i) < r_{table}, is invalid

Items that valid criteria and has a high reliability of the test are then used to outcomes learning physics test for the experiment class. For the reliability test was approached by the Kuder and Richardson (KR-20):

$$r_{ii} = \left[\frac{n}{n-1}\right]\left[\frac{S^2 - \Sigma pq}{S^2}\right]$$

The analysis date used in this research using by descriptive analysis techniques, and category of the physics learning outcomes test used:

Table 1. Category of the physics learning outcomes test.

Value Interval	Description
85 – 100	Excelent
65 – 84	Good
55 – 64	Medium
35 – 54	Bad
0 – 34	Very Bad

Result and Discussion

The physics learning outcomes when using Blended Learning Strategies in TKJ2 X Class SMK 1 South Sulawesi, can see in this table:

Table 2. Descriptive date of the physics learning outcomes

Means	**66,33**
Standard of deviation	17,72
High value	100
Low value	30

The result category of physics learning outcomes test when using by Blended Learning Strategies in TKJ2 X Class SMK 1 South Sulawesi, can see in this table:

Table 3. The result category of physics learning outcomes

Value Interval	Percentage (%)	Category
0-34	3.33	Very Bad
35-54	26.67	Bad
55-64	6.67	Medium
65-84	53.33	Good
85-100	10.00	Excellent

There is one student who gain value interval 0-34 very bad category with percentage of 3.33%, there are 8 students who received value interval 35-54 bad category with percentage of 26.67%. 2 students received value interval 55-64 medium category with percentage of 6.67%. 16 students received value interval

65-84 good category with percentage of 53.33%. And 3 students gain value interval 85-100 excellent category with a percentage of 10.00%.

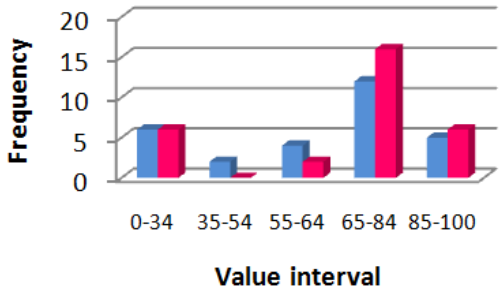
The physics learning outcomes TKJ2 X class SMK 1 South Sulawesi has reached the KKM standard, can see on the table:

Table 4. The physics learning outcomes has reached KKM standard

Category	Value	Percentage (%)
Complete	≥75	60%
Not complete	<75	40%
Number		100

Based on the cumulative percentage of the physics learning outcomes in the cognitive aspects like that there was a 40% or 12 students who obtain a score less than 75, and there are 60% or 18 students who obtain a score ≥ 75. This shows that 60% or 18 students who have achieved a minimum completeness criteria (KKM) of the classical. If the classical KKM reached 75% compared from 65% before being applied Blended learning strategies, it can be said there is improvement of achievement in the classical KKM. Now with blended learning strategies in physics learning experience positive improvements.

Physics learning outcomes can be seen from the thoroughness learning outcomes from the task in face to face learning with the task online learning.



The empirical facts obtained in this research indicate that the teachers and students activities when using Blended learning strategies can be optimized, since the mixed face to face learning and online learning, so as to develop activity and creativity students can be optimally in accordance with their respective capabilities. Blended learning strategies has the advantage students to learn more easily in accessing learning materials. Students are free to learn the subject matter independently utilize learning materials with online activity. Students can discussions with the teacher or other students outside from face-to-face learning in classroom. Teachers can add materials learning through with internet facility. Teachers can ask students to reading or undertake tests conducted before learning activity in the classroom.

Conclusions

Based on the results of date analysis and discussion, I can be concluded that: The first, Physics Learning outcomes accomplished after doing Blended learning strategies in physics learning including medium category. The second, Based on the above it can be argued that Blended learning strategies is one strategies in physics learning can be used to achieve minimum completeness criteria.

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The Development of Health Physics Learning Device Oriented on Direct Learning Model to Develop Declarative and Procedural Ability

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ABSTRACT

This research is a research and development that the expected product is a valid and feasible learning device. The intended learning device are (1) lesson plan, (2) learning material, (3) students worksheet, and (4) test of learning outcome. The development of the learning device based on the adaptation of development model four-D (4-D) which consisted of steps: (1) definition, (2) planning, and (3) development. This research was analyzed by descriptive analysis. After conducting test and validation, the learning device was declared valid and reliable thereby feasible to be used in physics learning. The testing of the learning device was conducted to the students of class XI. Nursing Midwifery of SMK Kesehatan Terpadu Mega Rezky Makassar. The result of the study based on the data analysis were: (1) lesson plan, (2) students worksheet, (3) learning material, and (4) test of learning outcome were declared valid and reliable. The students response toward the health physics learning device which oriented on direct learning model gave positive response by 80, 48% overall. For the best of learning outcome, 12% students were in excellent category, 76% were in good category, and 12% were in moderate category. Overall, there were 88% students experienced the classical learning completeness.

Keywords: Direct Learning, Learning Device, Declarative Ability, Procedural Ability

Introduction

The quality of education is very alarming. Based on the article published 27 November 2012 on the website of the BBC (British Broadcasting Corporation), Indonesia's education system ranks lowest in the world according to the Global League Tables published by Pearson Education Firma. The ranking combines international test results and data such as graduation rates between 2006 and 2010. Indonesia is at the bottom along with Mexico and Brazil. Aware of this backwardness government seeks to improve the quality of education, especially in schools. Through the process of learning, the teacher as a profession that plays an important role in improving the quality, is expected to develop and select appropriate strategies for the achievement of learning objectives.

Syllabus subject matter physics at SMK have different characteristics to the subject matter of physics in high school. Based on the experience of teaching subject in vocational health physics integrated Mega Rezky Makassar, has encountered problems during the learning of physics, namely the poor quality of education of students as indicated by not achieving completeness criteria classical learning in the classroom XI.A Nursing Midwife. To improve this, required the development of health physics learning device at SMK Health where none previously existed. Learning materials distributed only in a high school physics books and books D3 level nursing. Therefore, learning materials

need to be collected by the teacher to be teaching materials.

Based on the description above, researchers conducted a study with the tittle "The Development of Health Physics Learning Device Oriented on Direct Learning Model to Develop Declarative and Procedural Ability.

Based on the background mentioned above, the formulation of the problem in this research are as follows.

a. How the quality of the learning device is physics oriented health direct instructional model to develop the capability of declarative and procedural?
b. How is the response of learners in the learning activities using the learning device physics oriented health direct instructional model to develop the ability of declarative and procedural?
c. How big is the learning outcomes of students with the use of health physics learning device that has been develop?

The purpose of this study was formulated as follows:

a. Developing a learning device physics oriented health direct instructional model to develop the ability declarative and procedural.
b. Describing the response of learners in the learning activities using the learning device physics oriented health direct instructional model to develop the ability of declarative and procedural.
c. Describe the learning outcomes of students who use the health physics lesson.

Referring to the objectives of the study, the benefits of this research are as follows.

a. For teachers, allows teachers to present material SMK Health physics.
b. For learners, teaching materials can be used as a reference in learning physics.
c. For schools, provide a solution to overcome the limitations of physics teaching materials vocational health.
d. As a reference for subsequent researchers who want to develop this kind of learning device.

Literature

Learning

To many definitions of learning. Each expert has a different definition of learning, depending on the point of view of each. Understanding learning the most frequently encountered is to repeat the lessons in school. In contrast to the foregoing, Gagne in Ratna Wilis (2011: 2), says that learning can be defined as the process by which an organization to change its behavior as a result of experience, so someone said to learn if the person is experiencing behavioral changes during the learning process. In line with Gagne, Baharuddin (2010: 162) says that learning is an activity carried out by someone to get a change in him through training or experiences.

Based on the above definition, it can be concluded about the definition of learning includes two main things, namely:

1. Change to acquire new skills
2. Exercise or practice occurred because businesses

Teaching and Learning Physics

According Chodijah (2012: 5), learning is programmed activities of teachers in instructional design, to make learners active learning that emphasizes the provision of learning resources.

In physics learning the most important is an active learners learn while the part of teachers are expected to master the material

that would be taught, understood the situation so as to teach students in accordance with state and development of learners, and can prepare the ingredients so easily captured learners.

Physics to enhance learning in the classroom, the necessary learning tool. This is in accordance with Government Regulation No. 19 of 2005 relating to the standard process, requires that teachers are expected to develop a learning plan. Moreover, in Government Regulation No. 19 Year 2005 Article 20 states that teachers are expected to develop learning materials and required for students in the educational unit to develop the RPP. One element in the RPP is a source of learning, so teachers are expected to develop teaching materials as a source of learning.

Learning Tool

Learning device is a device that is used in the learning process. Learning tools needed to manage the learning process in the form: Syllabus, Learning Implementation Plan (RPP), Worksheet Students (LKPD), Evaluation Instrument or test results for Learning (THB), instructional media, and textbooks students (Trianto 2007: 68).

Learning Model

Stevany (2013) in a research article, said learning model is one important element in the learning process. By using the appropriate learning models, the learning process will be better and not boring. Tawil (2011: 1) agreed with the statement above, which states that the learning model is a guide for the teacher or lecturer in planning learning in the classroom, ranging from preparing a learning device, media and tools, until the evaluation tools that lead to achieving the objectives learning.

Direct Learning Model in Health Physics

Trianto (2012: 41) says direct instruction (direct instruction) is a learning model that is center teacher. In the direct learning model, there are five very important phase. Teachers started the lesson with an explanation of the purpose and background of learning, and prepare learners to accept the teacher's explanation.

Table 2.1 Syntax Live Learning Model

Phase	Teacher's Role
Phase 1 Outline the objectives and prepare learners	Teacher explains the learning objectives, lesson background information, the importance of the lesson, prepare students for learning.
Phase 2 Demonstrate the knowledge and skills	Teacher demonstrates the skill correctly, or present information step by step.
Phase 3 Guiding training	Teacher plans and provide initial training guidance
Phase 4 Checking understanding and provide feedback	Check whether learners have managed to do a good job, member feedback.
Phase 5	Teachers prepare for the opportunity to do

Providing opportunities for advanced training and implementation	advanced training, with particular attention to the implementation of more complex situations and everyday life.

Source: Trianto (2012: 43)

In the preparation phase, teachers motivate learners to continue receiving a percentage of the subject matter which is done through the demonstration of certain skills. Learning ends with providing opportunities for learners to undertake training and providing such feedback, teachers should always try to provide opportunities for students to apply knowledge or skills learned in real-life situations.

Declarative and Procedural Knowledge.

In the field of the study of physics SMK Health, there are two kinds of knowledge that is deemed most need to be assessed, ie declarative knowledge (declarative knowledge) and procedural knowledge (procedural knowledge).

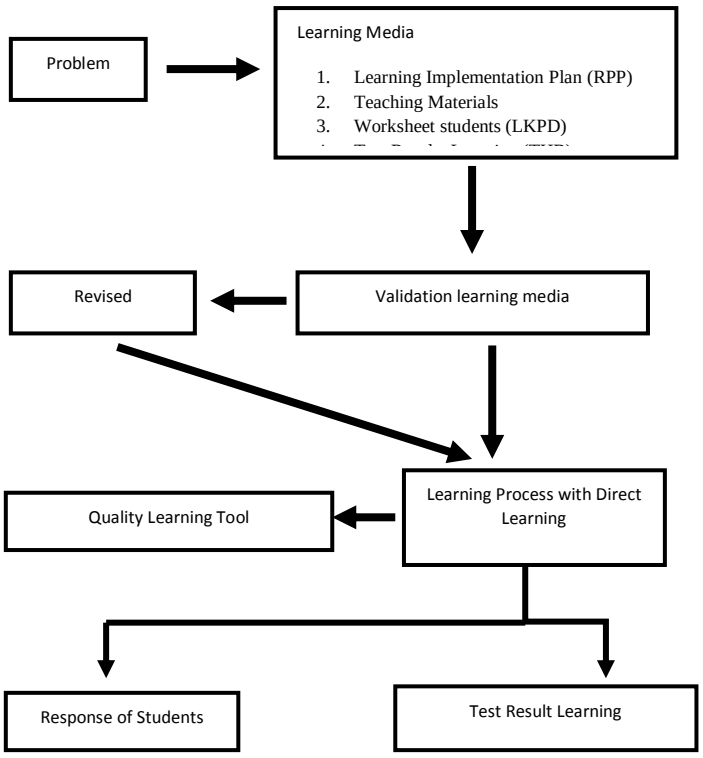
Knowledge Declarative

Declarative knowledge is factual information that is known by someone. This knowledge can be expressed either verbally or in writing. Examples of this knowledge for example is a learner knows that the formula for calculating the momentum in physics. Formula momentum is mass multiplied by velocity.

Procedural Knowledge

Procedural knowledge is how someone is doing something, knowledge of how a person's performance in carrying out the steps in a process. Examples of this knowledge is a learner know the mass of an object, its speed, and how th procedure determine the object's momentum.

Framework



Research Methods

Based on the background and the formulation of research problems that have been raised, then this kind of research is the Research Development (Research and Development or R & D).

The research was conducted at SMK development of Integrated Health Mega Rezky Makassar Makassar City, located on the road Aroepala block X no. 1 B Makassar. The research was conducted in the second semester of the academic year 2013/2014. The subjects were students of class XI. A Nursing Midwifery. The research subject was chosen because on that class completeness lowest. Number of students in the class of 25 people.

The study design learning software development using the model of software development, adapted from the model 4-D into 3-D models, which define, design, and develop. The trial design used is One-Shot Case Study. Research instrument used in the form of sheets validation of learning tools and response learners. Data analysis technique used is descriptive statistical analysis techniques such as analysis of the validity and reliability of the instrument of learning and research as well as quantitative descriptive analysis of the test results and response learners learn.

Results and Discussion

As previously noted, this study included research into the type of development (research and development), which aims to produce a valid learning device and reliability so that used in physics learning SMK Health.

In the validation phase learning device there are several components that require little revision. Learning device in the form of RPP requires little revision, namely improvements to the learning objectives in the revision of the assessment rubric, or scoring guidelines. On the teaching materials needed little revision on the part of the cover material and illustration material needs to be adapted to the material. In LKPD required the addition of a supporting brief LKPD. On learning about the test results, there are some procedural questions on the test that needs to be revised, while the response to the questionnaire required learners additional item response in a negative statement.

In general the results of the validation and reliability of devices and instruments that are in the category of very decent. And the results of the response given students also generally give a positive response.

Conclusion

Based on the research that has been conducted by researchers at the Integrated Health SMK Mega Rezky Makassar, Nursing Midwifery XI.A class, it can be concluded:

1. The quality of learning tools generated in the study include: RPP, LKPD, Teaching Materials and Test Results Learning has met the criteria of validity and reliability.
2. Response learners XI.A class Integrated Health Nursing Midwifery SMK Mega Rezky Makassar on learning device physics oriented health direct instructional model generally gave a positive response.
3. Traditionally the study of students which includes mastery of declarative and procedural capabilities have met KKM, with a percentage of the value of learning completeness.

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Developing Assessment Search Learning Device to Improve Achievement Motivation and Learning Outcomes of Physics Subject at Class XI IPA of SMA Negeri 22 Makassar

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ABSTRACT

This was a research and development study, which aimed to: (1) develop assessment search learning device, (2) find out the increase of achievement motivation of learners after the application of assessment search learning device, and (3) find out the students' learning outcome of physics subject after the application of assessment search learning device. The development of learning device was using Thiagarajan models (Four-D), which consisted of four phases: (1) defining, (2) designing, (3) developing, and (4) disseminating. Learning device trials was conducted on students of class XI SMA Negeri 22 Makassar IPA3 in academic year 2015/2016. The data were collected using observation sheet, questionnaire and test of learning outcomes. Then, the data were analyzed with descriptive analysis techniques. The findings showed that (1) Profile of assessment search learning device produced including Syllabus, Lesson Plan, Students' book, Students' worksheet, learning media, observation sheet of device trials, questionnaire of students' response, questionnaire of achievement motivation, and tests of learning Outcomes of physics subject was valid, practical, and effective so that it can be used for teaching physics; (2) Improvement of achievement motivation of learners after the application of assessment search learning device was categorized as high; (3) the improvement of students' learning outcomes on physics subject after the application of assessment search learning device was categorized as high. Based on these findings, the assessment search learning device that has been developed was one of physics learning strategies that can be used to enhance the achievement motivation and learning outcomes of physics students.

Keywords: assessment search learning device, achievement motivation and learning outcomes of physics subject.

Introduction

Based on KTSP (Kurikulum Tingkat Satuan Pendidikan) a physics lesson at high school level aims to provide knowledge to the students about various phenomena encountered in everyday life. The knowledge becomes a provision for learners to enter higher education. In order to achieve the target, the government draws up the basic competencies that must be mastered by the learners. Each basic competency contains several indicators as a measuring tool of the basic competence achievement. The important thing in the implementation of the curriculum (KTSP) is the concept of mastery learning. Based on mastery learning theory, all students have opportunity to master the material being studied. The concept of mastery learning in teaching in schools is not new,

because it has long been raised by many experts. Carrol (in Nasution, 2009: 38) argues that every student can master the material given if given sufficient time. Sufficient time means the time spent by each student to master the subject matter in accordance with the individual differences of learners in speed capture of lessons.

Researcher as a teacher at SMA Negeri 22 Makassar had tried to always make improvements in teaching. However, in learning process, it is still found that several learners are less active in following the lessons. There are some activities undertaken by learners that are not relevant to the learning activities, such as having conversation unrelated to materials, daydreaming, not doing exercises properly, drawing attention to outside the classroom, and asking permission to the washroom but actually going to the cafeteria and not entering the classroom again.

Some of the above finding is indicated the low achievement motivation of students of class XI IPA at SMAN 22 Makassar when studying physics. Quantitatively, researcher did not have baseline data about how large a percentage of achievement motivation of learners while studying. However, based on the findings above, it can be concluded that generally, the achievement motivation of learners in learning is still considered low. The low achievement motivation will impact on students' learning outcomes.

To overcome the lack of achievement motivation and learning outcomes of students, it is suitable to apply Assessment Search strategy. Assessment Search conducted by the teacher in the learning process is a process of collecting and using information and learning outcomes of students conducted by the teacher' in order that the students can achieve the educational goals that have been defined, namely standard competence, basic competence, and learning achievement indicators contained in the curriculum. According to Hisham et al, (2007: 15), that the search assessment is a learning strategy that is quite interesting to assess the class in a short time and at the same time engage learners since the beginning of the meeting to know each other and work together. After students perform a number of learning activities through Assessment Search strategy, the achievement motivation and learning outcomes of students is expected to increase.

Literature Review

Learning Device

The device used in the learning process called a learning device. According to Trianto (2010: 96), learning device needed to manage the learning process can be: syllabus, lesson plan, students' book, students' worksheet, and learning media.

1. Assessment Search Strategy

Assessment Search strategy is active learning strategies in which this can be done in a short time and at the same time engage learners to know each other and work together. Active learning is a learning that invites students to learn actively.

The steps of learning assessment search strategy according to Hisham Zaini et al (2007: 15) are as follows:

a. Write a question that can be answered in concrete.
b. Divide students into groups, each learner is given question and ask each to interview a friend of the group to get an answer from them.
c. Ensure that every student has a question based on his/her part.
d. Ask learners to select and summarize data from the

interviews that have been conducted.

e. Ask each group to report the results of what they have learned from their friends in class

2. Achievement Motivation

The concept of achievement motivation was first formulated by Henry Alexander Murray. Murray used the term need for achievement for achievement motivation, which is described as desire or tendency to do difficult things as quickly and well as possible (Purwanto, 1993: 20-521). According to Murray (in Winkel 1984: 29), achievement motivation is the driving force to achieve the level of academic achievement as high as possible for the sake of themselves.

The characteristics of a person who has high achievement motivation expressed by Mc. Clelland cited in Wahidin (2001) are:

a. Having a desire to compete fairly with himself and with others.
b. Having a desire to work well.
c. Thinking realistically, knows his abilities and weaknesses.
d. Having Personal responsibility
e. Being able to make a breakthrough in thinking
f. Thinking strategically and long term
g. Utilizing feedback for improvement.

3. Students' Learning Outcomes

The learning process is the core of all activities at school. Therefore, before the learning process teachers should formulate clearly the objectives to be achieved by learners. In order that the purpose of learning goes well, the teachers must understand their duties and roles as educators. According Brow (in Suryasubroto, 2002: 3), the tasks and the roles of teachers are to develop learning materials, plan the subject matter, and evaluate the learning process of learners.

Methodology

Based on the objectives, this research includes Research and Development. The development model used is a model of Thiagarajan (Four-D). This research was conducted in SMA Negeri 22 Makassar in the academic year 2015/2016 in January to March 2016, with the research subjects were students of class XI IPA3. Instruments employed to obtain data are:

1. Validation sheet of learning device
2. Observation sheet of students' activities
3. Observation sheet of the implementation of learning device
4. Questionnaire of students' response
5. Achievement motivation questionnaire
6. Learning outcomes test of physics subject

The data analysis on the development of learning device is descriptive statistical analysis technique.

Findings

1. The result of defining phase

This stage aims to establish and define the conditions of learning that includes learning objectives and learning materials restrictions. This stage includes:

a. Front End Analysis

This activity is performed to determine the underlying problem required in the development of the subject matter. Based on the review of the activities of physics subject in SMA Negeri 22 Makassar, the fundamental issues that need to be pursued the solution is the availability of teaching materials and the way of presenting the lesson material. The learning tendencies provide less opportunity for learners to develop the skills, less attention to the thinking ability of students, and lack of attention to achievement motivation of

learners. As a result, learners are passive, lazy to ask and express their opinion about the material being studied. The learning process is still dominated by teachers while learners are mostly just listening to what the teacher presents. Another thing is that there are many teachers still teach from the textbooks and worksheet purchased from publishers, which sometimes does not correspond to the indicators and learning objectives in the lesson plan. Based on a review of KTSP Curriculum and the study of relevant learning theories, it is obtained a description on how to present a desired learning. Based on the case, the researchers chose the assessment search strategy to be applied in the study of physics.

b. Analysis of learners

The purpose of this analysis is to examine the characteristics of learners including students' cognitive development, prior knowledge and social background. From the observations, it is obtained the data about the characteristics of learners as follows:

1) Learners as the subject of this research were class XI IPA3 of SMAN 22 Makassar. Thus the average age of students is 16-17 years, where at this age students' cognitive development is in the stage of formal Operational. At this stage, children should have been able to think logically and think about abstract things, even though they sometimes need concrete objects with their everyday experience.
2) Prior ability of students of class XI IPA3 of SMAN 22 Makassar based on selection of new admissions had an average of National Examination and report score of IPA ≥ 70. In academic year 2015/2016, the mid test score of the students in class XI IPA3 achieve classical completeness of 34.15% with KKM 72. After several attempts to improve learning outcomes such as remedial, the ability of learners is at a value ≥ 72.
3) The students of have different background, such as parents' educational background, parents' income or social status.

   Based on these characteristics, it can be said that subject of the research is heterogeneous.

c. Material analysis

The material analysis aims to identify, elaborate, and systematically compile the main material to be learned. These materials are arranged hierarchically and sorted out based on the role. The material analyzed in this study is the rotational dynamics and rigid body equilibrium.

d. Task analysis

The task analysis aims to identify the key skills required to design tasks that must be performed learners during and after implementing the learning. The task analysis includes the understanding of the material and learning objectives, and becomes the reference to formulate learning objectives and skills that will be developed in a learning device. The results of the task analysis contained in BBPD and LKPD to be done and completed by learners in learning process. In BBPD, there is an 'explaining' stage which is the stage to explain phenomena or resolve the problem of the concepts that have been learned. The same thing is stated in several tasks in LKPD, where learners have to fill in the empty spaces that had been prepared as a form of task completion. Meanwhile, the task beyond teaching and learning process is giving homework (PR), which resolve some problems associated with the basic competencies.

e. Analysis of Learning Objectives Specifications

Activities performed in this analysis is to formulate learning objectives based on the analysis of learners, material analysis and task analysis.

2. The results of the 'design' phase

At the 'design' stage, it is carried out the writing of learning and research instrument including the preparation of the following:

a. Syllabus
b. Lesson plan
c. Students' textbook
d. Students' worksheet
e. Learning Media (Slides)
f. Validation sheets of learning device
g. Observation sheets of learners' activities
h. Observation sheets of the implementation of learning device
i. Questionnaire for students' response
j. Questionnaire of students' achievement motivation
k. Learning outcomes of physics subject

Device produced at the design stage (Design) is a prototype device-1.

3. Results of Development Phase

At this development stage, it will be produced the final form of learning device which has been revised based on the assessment of experts and the data obtained from the trials. The results of activities during the development stage are as follows:

a. The results of the validation of learning device

One of the main criteria to determine whether or not a learning device can be used is the result of experts' validation. The devices used in the study are syllabus, lesson plan, students' book, students' worksheet, and learning media. The learning device that has been validated can be described as follows:

1) Syllabus

The aspects that are considered in validating the syllabus are format, content, language, and time. The results of the validation of the experts can be summarized in Table 4.1 below:

Table 4.1 Summary of syllabus validation result

No	Evaluation Criteria	$\bar{x}$	Notes
1	Syllabus Form	3,75	Very valid
2	Material	3,93	Very valid
3	Language	3,83	Very valid
4	Time	3,00	Valid
	Average	3,62	Very valid

Table 4.1 showed that the average score of syllabus validity is in very valid category with reliability coefficient 99%. The validator's evaluation concludes that the syllabus developed is very good and can be applied without any revision.

2) Lesson plan

The aspects that are considered in validating the lesson plan are format, content, language, and time. The results of the validation of the experts can be summarized in Table 4.2 below:

Table 4.2 Summary of lesson plan validation result

No	Evaluation Criteria	$\bar{x}$	Notes
1	Lesson plan Form Material	4,00	Very valid
2	Language	3,81	Very valid
3	Time	3,71	Very valid
4		4,00	Very valid
	Average	3,88	Very valid

Table 4.2 shows that the average score of lesson plan validity is in very valid category with reliability coefficient 76%. Even though each aspect fulfills all validity criteria, but the validator, Khaeruddin, S.Pd., M.Pd, recommends that the developed lesson plan is not good enough and can be applied after some revisions. The suggestions include:

a) The formulation of learning objectives should fulfill four criteria of Audience (A), Behavoiur (B), Condition (C) and Digrie (D).
b) The learning steps of assessment search strategy must be clear
c) Cognitive process in science should refer to science skill.

Based on validator's recommendation, the researcher revised the lesson plan which the result of analysis can be seen in table 4.3 below:

Table 4.3 summary of lesson plan validation after revision

No	Evaluation aspect	$\bar{x}$	Notes
1	Lesson plan Form	4,00	Very valid
2	Material	4,00	Very valid
3	Language	4,00	Very valid
4	Time	4,00	Very valid
	Average	4,00	Very valid

Table 4.3 shows that the average score of lesson plan validity is in very valid category with reliability coefficient of 100%. The validator's evaluation concludes that the lesson plan developed is very good and can be applied without any revision.

3) Students' book

In completing the students' book, the aspects that should be noticed are form, content, language, and benefit. The result of validation can be seen in table 4.4.

Table 4.4 the result of students' book validation

No	Evaluation aspect	$\bar{x}$	Notes
1	Form	4,00	Very valid
2	content	3,66	Very valid
3	language	3,80	Very valid
4	benefit	4,00	Very valid
	Average	3,86	Very valid

Based on table 4.4, the average score of validity is in very valid category with reliability coefficient of 97%. The validator's evaluation concludes that the students' book developed is very good and can be applied without any revision.

4) Students' worksheet

In completing the students' worksheet, the aspects that should be noticed are form, content, language, time, and benefit. The result of validation can be seen in table 4.5.

Table 4.5 the result of students' worksheet validation

No	Evaluation aspects	$\bar{x}$	Notes
1	Form	3,88	Very valid
2	content	3,90	Very valid
3	language	3,70	Very valid
4	time	3,00	Very valid
5	benefit	4,00	Very valid
	average	3,70	Very valid

Based on table 4.5, the average score of validity is in very valid category with reliability coefficient of 98%. The validator's evaluation concludes that the students' worksheet developed is very good and can be applied without any revision.

Based on the analysis of the evaluation result of learning devices, it can be concluded that learning devices using assessment search strategy consisting of syllabus, lesson plan, students' book, students' worksheet, and learning media have fulfilled the criteria of validity according to the expert's evaluation. The result of learning device validation can be seen in figure 4.1.

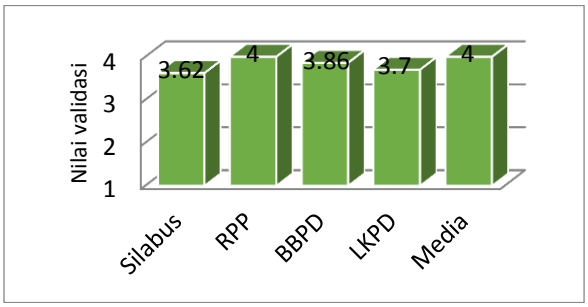

Figure 4.1 Diagram of learning devices validation

b. The result of trial observation

1) The result of observation on students' activity

The result can be seen in the following figure:

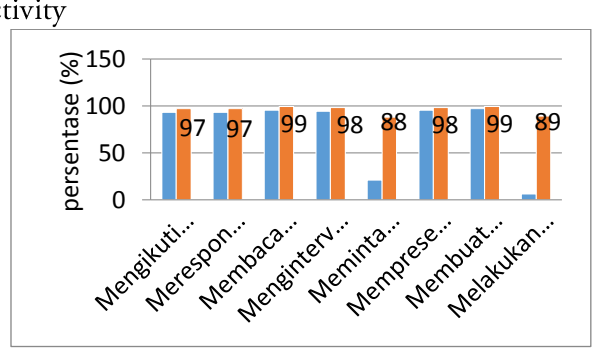

Figure 4.2 Diagram of the result of observation on students' activity

2) The result of observation on learning device implementation

The result can be seen in the following table.

Table 4.7 the result of observation on learning device implementation

No	Evaluation aspect	$\bar{x}$	Notes
1	Pre-activity	2	done
2	Main activity	2	done
3	Final activity	2	done
4	Learning source time	2	done
5		1,9	done
	average	1,98	done

Table 4.7 shows that all components observed in the implementation of assessment search learning devices are completed with reliability coefficient of 99%.

3) The result of students' response

The data can be seen in the following figure.

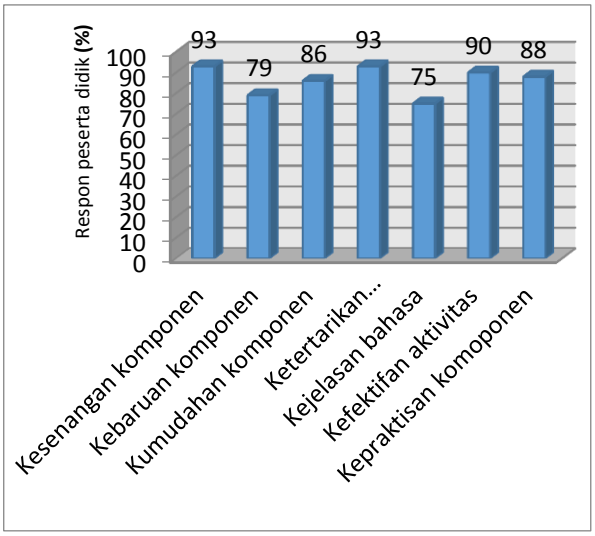

Figure 4.4 Diagram of the students' response toward the learning device and implementation

4) The result of motivation achievement analysis

The result of analysis can be seen in the following figure.

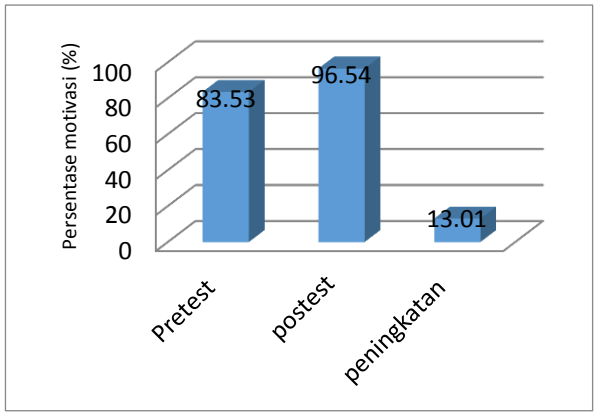

Figure 4.5 the improvement of achievement motivation from pretest to posttest

Figure 4.5 shows that the average of students' achievement motivation increased from 83.53% to 96.54%.

5) The result of learning outcomes of physics subject

The result of the improvement from pretest to posttest can be seen in the following figure.

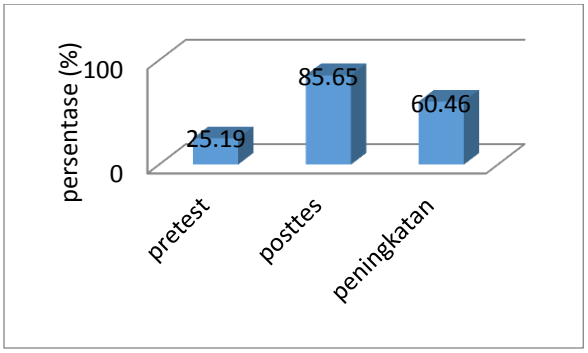

Figure 4.6 the improvement of learning outcomes from pretest to posttest

The result of the improvement learning completeness from pretest to posttest can be seen in the following figure.

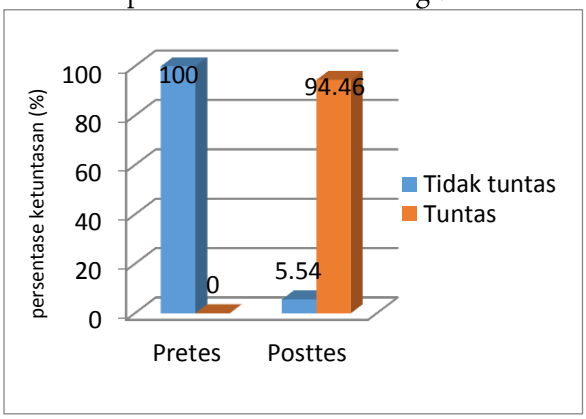

Figure 4.7 the improvement of learning completeness from pretest to posttest

Discussion

As previously noted, this study is the type of research and development, which aims to produce a valid, practical and effective learning device to be used in high school. By using assessment search strategy, validity, practicality, and effectively of learning device can be elaborated as follow:

1. The validity of learning device

The evaluation result by two validators, the lecturers who are experts in the fields of physics, shows that the components of learning device and research instruments are categorized as very valid, very good and can be used without revision. It means that the learning device and research instruments developed have fulfilled validity criteria.

2. The Practicality of learning device

Practicality of learning device developed can be seen from validator's evaluation on the device and the implementation of the device in learning process. The result of evaluation shows that the devices developed are in the category of very valid and very well to use without revision, while the result of evaluation on the implementation of learning device is categorized as completely done.

3. The effectiveness of learning device

The effectiveness of the learning device developed in this study can be viewed from three components: (1) students' activities, (2) students' response, and (3) the thoroughness of the students' learning. The findings show that the average reliability of students' is 96%, which means that students' activity during the learning is good because it has exceeded 75%. The percentage of the students' response component is 86.29% which is categorized as positive and has exceeded the limit of 50%. From the findings, 34 out of 36 students or equal to 94.46% has fulfilled the minimum completeness criteria of 72.

4. The increase of Students' Achievement Motivation

The findings show that the achievement motivation of students using N-gain formula is increased. It causes by positive response from students who feel fun with learning activity using assessment search. In Assessment Search learning, there is an activity where the students do exercise on worksheet and quiz every meeting, and it makes them motivated to always want to get a higher score. This is consistent with the theory put forward by Mc. Clelland (1981) that individuals who have high achievement motivation will have a high sense of responsibility and confidence, more resilient, more active in carrying out a task, has high expectation for success and a desire to finish the job. The same thing also expressed by Heckhausen (in Harditono 1979: 8) that there are three standards of excellence of achievement motivation, namely: (1) completion of a job well, (2) a comparison with previous achievements, and (3) the comparison with the achievements of others.

5. The improvement of physics learning outcomes

The results of the data analysis of physics learning outcomes of learners by using the formula N-gain showed that 80.54% of students are at the N-gain high category, 19.46% of students are in N-gain medium category, and no learners are the N-gain low category. Based on figure 4.9, the average learning outcomes of learners before the application assessment search learning is 25.19% and the average learning outcomes of students after assessment search learning applied is 85.65%. Based on figure 4.11, no students achieved KKM standard before the application of assessment search learning,

and 94.46% achieved KKM standard after the application of assessment search learning.

This improvement on learning outcomes is resulted by some aspects, such as the teachers' ability in managing the class and fun classroom atmosphere based on the students' positive response on the questionnaire. This is also supported by the theory proposed by Hisham Zaini, Bermawy Munthe, Sekar Ayu Aryani that assessment search learning is an interesting strategy to evaluate the classroom fast and engage the students since the beginning to cooperate.

Conclusion

Based on the findings and discussion, it can be concluded that:

1. Learning device of Assessment search strategy produced in this research are syllabus, lesson plan, students' book, students' worksheet, learning media, observation sheet, achievement motivation questionnaire, and learning outcomes test for physics which is valid, practical, effective, and can be used for physics learning.
2. The improvement of the students' achievement motivation after the application of assessment search learning is categorized as high.
3. The improvement of the students' learning outcomes after the application of assessment search learning is categorized as high.

Based on these conclusions, it can be stated that assessment search learning device developed is one of physics learning strategies that can be used to enhance the students' achievement motivation and learning outcomes on physics particularly on material about the rotational dynamics and rigid body equilibrium.

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Determination of Lower Boundary Ramsey Numbers for Stars Graph S8 on Wheels Graph W_12

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ABSTRACT

Suppose it was given two graphs G and H. Ramsey Numbers for graph G of the graph H, denoted by R (G, H) was the smallest natural number n such that for every graph F of order n will meet the following properties: F contained a graph G or complement of F contained the graph H. This study aimed at determining the lower limit S_8 and W_12 or R (S_ (8) W_12). The determination based on the lower limit and the lower limit Chavatal and Harary. The lower limit was given by Chavatal and Harary, for Ramsey numbers on the graph stars S_8 toward wheel W_12 was R (S_8, W_12) ⩾ (⟦ χ (W⟧ _12-1)) (c (S_8-1)) + 1 = 15, with χ (W_12) was the chromatic number, wheel graph point W_12 and c (S_8) was the cardinality of the largest component of the graph S_8. Based on the lower limit Chavatal and Harary were constructed critical to S_8 and W_12, its order was greater than the lower limit value, which was given by Chavatal and Harary. The order of the critical graph was a lower limit for R Best (S_ (8) W_12). The results showed that the lower limit for the order W_12 S_8 and greater than the lower limit value given Chavatal and Harary. So, the finding was R (S_8, W_12) ⩾20.

Keywords: Numbers Ramsey; Stars Graph; and Wheels Graph

Introduction

In 1935, Erdos and Szekeres assess and apply theory Ramsey into graph theory Ramsey's theorem which produces complete graph (Hasmawati, 2007). In this case, the object of the problem is a complete graph. Graf G (V, E) is a system that consists of a finite set of nonempty V and a subset of the set pair unsorted member-member V. In terms of the graph G (V, E), the set V = V (G) and set E = E (G) if the couple unsorted uv∈V, u ± v the graph G (V, E) is called a simple graph.

Ramsey theory in the concept of an object graph with a complete graph can be written as follows: for each natural number n, there is a natural number R (n) such that, if the sides of the complete graph with m points, m≥R (n) is colored with colour red or blue colour will always contain a sub graph that isomorph with K_n as a sub graph. Numbers R (n) is called Classical Ramsey numbers.

The Classical Ramsey Numbers are for m and positive integer n, n m and Ramsey number is the smallest positive integer R such that if the sides of the complete graph K_R is colored with two colours will be formed sub graph colored colored subgraph K_m or K_n. In other words, for any graph F with R point then F will load K_m or complement of F woll load K_n.

Suppose G is a graph. Graf F is called the complement of G if every pair of points being linked by one side at F if only if couples the point is not linked by an edge in G. Based on the concepts of complement, the notion of two colours graph Ramsey numbers can be written as follows: Given two numbers g and graph

H. Ramsey graph G and H is defined as the smallest natural number n such that every graph F with n points will load G or the complement of F covers H. Ramsey numbers graph G and H is denoted by R (G, H). The lower limit of Ramsey numbers R (G, H) is given by Chavatal and Harary (1972), namely R (G, H) ≥ (χ (H) -1) (C (G) -1) +1, where χ (H) is a graph chromatic number of H and C (G) denotes the number of points on the graph is the largest component in graph G. The original numbers smallest K such that H color called chromatic number of K, denoted χ (H). As an example:

$$\chi(W_m) = \begin{Bmatrix} 3\ untuk\ n\ genap \\ 4\ untuk\ n\ ganjil \end{Bmatrix}$$

If the graph on the theorem is not only a complete graph but it applies to any graph, then the theorem is called theorem Ramsey graph. Graf in question here is a simple graph and finite.

The study of two-color graph Ramsey numbers R (G, H) has a lot to do. Before describing some of the results first presented understanding star graph, the graph track, graph and graph-wheel cycles. Suppose u is a point on a graph G. The degree of u is denoted d (u) is the number of dots neighboring u. Graph trajectory is a graph that has two points of degree one and other points of degree two. A graph G is called connected if any two points in G is always contained in a track. Star graph with n point denoted by S_n is a connected graph that has a single point of degree n-1 and n-1 point of degree 1. While the cycle graph is a cycle every point connected graph of degree two. Cycle Graph by n points are notify as C_n. One of the graph that contains stars and the cycle is a graph wheel. Graf wheels can be obtained by associating a point x to all points in the cycle C_m, denoted W_m. So graf W_m wheel has a point total m + 1.

In general, the study's numbers on the graph Ramsey S_n star against the wheel W_m for n odd many results found, however, for even n and m even only a few are known. Here are some researchers who have studied in particular graph Ramsey numbers of stars and wheels.

Baskoro et.al (2002), examined $R(S_n, W_4) = 2n - 1$ for n odd and $R(S_n, W_4) = 2n + 1$ for n even, and$R(S_n, W_5) = 3n - 2$.

In the next year Hasmawati (2003), examined the Ramsey number is $R(S_n, W_m) = m + n - 2$ for m even dan n odd.

Furthermore, Chen et.al (2004), examined $R(S_n, W_6) = 2n + 1$ for $n \geq 3$ in the same research, proved that $R(S_n, W_m) = 3n - 2$ for m odd and $n \geq m - 1 \geq 2$.

In the same year Zhang (2004), examined Ramsey $R(S_n, W_8) = 2n + 1$ for n odd and $R(S_n, W_8) = 2n + 2$ for n even.

In the next year Korolova (2005), examined Ramsey number $R(S_n, W_4) = 3n - 2$ if $n = m, m + 1$ or $m + 2$.

Besides, Hasmawati (2007), proved $R(S_n, W_m) = 3n - 2$ for m odd, and $3 \leq m \leq 2n - 1$ and $R(S_n, W_m)$ for n odd and m even and $m = 2n - 2, 2n - 4, 2n - 6$ or $2n - 8$.

The recent investigation Ramsey number for star and wheel, $R(S_n, W_m)$ is given by Ahsan (2010), is $2n + 1 \leq R(S_n, W_8) \leq \frac{5(n-1)}{2}$ for $n \geq 11$, $n \equiv 3$ (mod 4), in the same year, di Korani (2010), examined Ramsey number for he

combined graph disjoint reviewed wheel against the order of seven, the result is $R(kS_n, W_6) = (k+1)n + 1$ for $n \geq 4$ and $k \in N$ and if $n_i \geq n_{i+1}$ for $i = 1,2, \ldots, k-1$ and $2n_k > n_{k-1}$, so $R\left(\bigcup_{i=1}^{k} S_{ni}, W_6\right) = R(S_{nk}, W_6) + \sum_{i=1}^{k-1} n_i$, for $n_i \geq 4$ for each i.

From the foregoing, it is known that the Ramsey numbers R (S_n, W_m) for n and m is even, an issue that is still open for review. Therefore in this study examined Ramsey numbers for n is even and m is even. The purpose of this study is to determine the lower limit for the graph Ramsey numbers against the wheel W_12 S_8 star.

Research Method

The lower limit of the graph Ramsey numbers containing two colours wheel star and critically analysed by constructing a graph based on the lower limit Chavatal-Harary, Method used in this study is a literature study, using experimental data. Location of the study conducted at the University of Hasanuddin Makassar.

Research Findings

Here are some of the results in this paper:

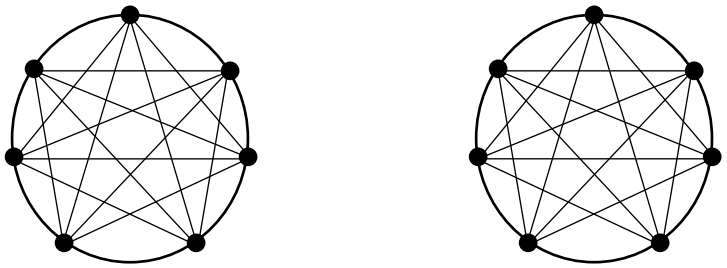
Proposition: R (S_ (8) W_12) ≥20.

In this study showed that the more common, especially for the lower limit of the graph Ramsey numbers of stars against the wheel, namely R (S_8, W_12) = 20.

Proposition evidence: $R\left(S_{8,} W_{12}\right) \geq 20$.

The lower limit Chavatal and Harary for $R\left(S_{8,} W_{12}\right)$ is $R(G,H) \geq (\chi(H)-1)(C(G)-1)+1$. Suppose $G = S_8$ and$H = W_{12}$. Where $\chi(H) = \chi(W_{12}) = 3$ and$C(G) = C(S_8) = 8$. It becomes $R(S_8, W_{12}) \geq (3-1)(8-1) + 1 = 15$.

Pay attention to graph $F = (\chi(W_{10}) - 1)K_{C(S_8)-1} = 2K_7$ in the following figure.



K_7 K_7

Figure 1. The graph type of $\boldsymbol{F = 2K_7}$

Graf F is a regular graph of order 14 or, d_F (x) = 6 for each x. While on S_8, there is one point called u with d (u) = 7. Thus F contains no S_8. In the following figure shows that F does not contain S_8 and F □ not load W_12. Graf F = 〖〗 _7 2K is a regular graph of order 7 or, d_F (x) = 6 for each x. While on S_8, there is one point called u with d (u) = 7. Thus F contains no S_8. Then consider the F □ graph in Figure 2 is shown that F □ also not load W_12.

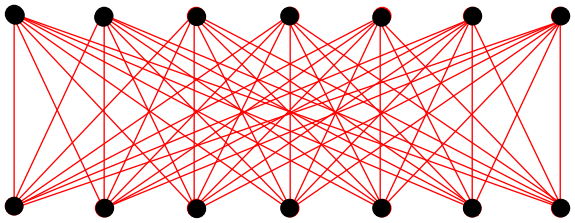


Figure 2. Graph $\overline{\boldsymbol{F}} = \boldsymbol{K_{7,7}}$

The complement of F or F □ is a complete bipartite graph K_7, 7. Bipartite graph has an even cycle. So Graf F load cycles 4, 6, 8, 10, 12, and 14. But there is no point in F □ which could become the focal point of degree W_12 wheel 12. Thus F □ not load wheel W_12. So F⊉S_8 and F □⊉W_12. Hence R (S_8, W_12)> | F | = 14 or R (S_8, W_12) ≥15. Presentation of the following is a description of how to get a lower limit greater than the lower limit given by Chavatal and Harary to graph S_8 against W_12. Select graph F_15yaitu F_15 = K_7∪T, where T = 6-regular with | T | = 8. Its structure is as shown below.

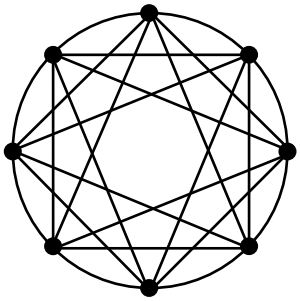


Figure 3. Graph $\boldsymbol{F_{15} = K_7 \cup T}$

Graph F_15 = K_7∪T not load S_8 for each point x in F_15, d (x) = 6. While on S_8, there is one point called u with d (u) = 7.

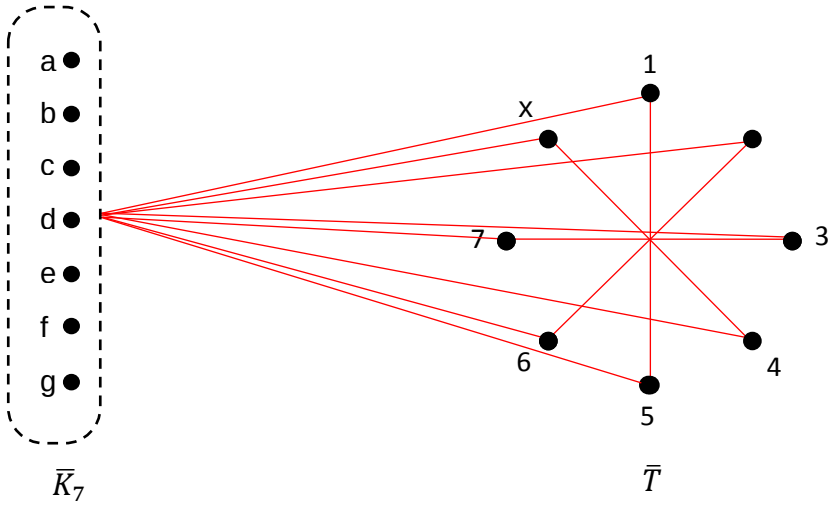


Figure 4. Graph $\bar{F}_{15} = \bar{K}_7 + \bar{T}$

The complement of F_15 can be seen in Figure IV.4 is F □_15 = K + T □ _7. Each point x in K _7, next door to each point in T □, and every point in T □ neighbors with seven points in K _7 and only one point in T □, so that d (x) = 8 for each point x in T □ , Take one focal point in T □ call x. Thus the cycle which can be formed are other points in T □ neighboring x that as many as 1 point called the point of 4. That means only 1 point in K _7 neighboring point 4 and x. Thus there is no C_12 cycle is formed, only C_3 formed. So F □_15 not load W_12.

So F_15⊉S_8 and F □_15⊉W_12. So F_15 = K_7∪T is critical for S_8 graph and W_12, so | F_15 | a lower limit for S_8 and W_12 so that R (S_8, W_12)> 15 or R (S_8, W_12) ≥ | F | + 1 = 16.

In a similar manner it can be shown that 17, 18, and 19 is also a lower limit for R (S_8, W_12). The following presentation shows that 20 is also a lower limit.

Select a graph of the order of 19 call F_19 F_19 = K_7∪K_6,6. Its structure is as in the following figure.

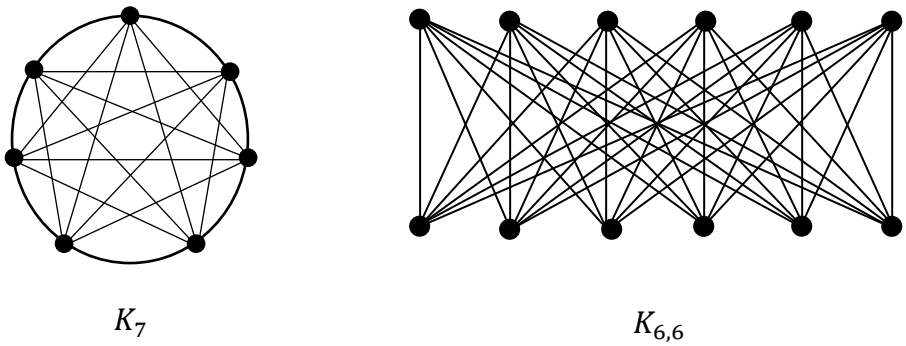


Figure 5. Graph $F_{19} = K_7 \cup K_{6,6}$

The Graph above shows that each point x in F_19, d (x) = 6. While on S_8, there is one point called u with d (u) = 7. Thus F_19 not load S_8. Next will be shown that F □_19 also not load W_12. The complement of F_19 can be seen in Figure 2 that K _7 + T □ or F □_19 = K + T □ _7.

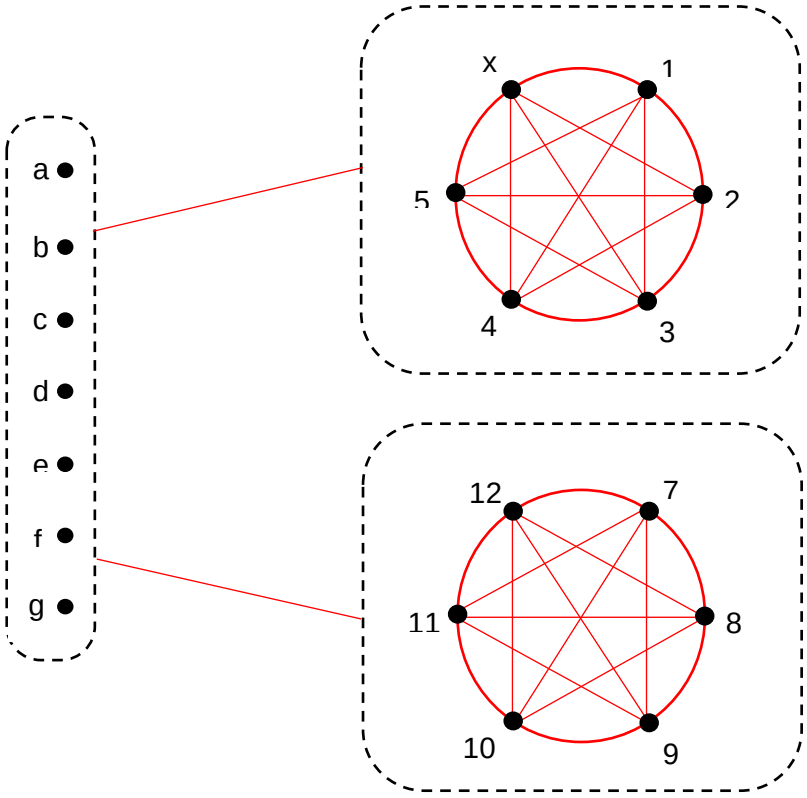


Figure 6. Graph $\overline{F}_{19} = \overline{K}_7 + \overline{T}$

Each point x in T □, d_T □ (x) = 5 and neighbouring any point on K _7. Means any point x in T □, d_F □ (x) = 12. Since each point x in T □, d_T □ (x) = 5, then every point x in T □ neighbours with only 5 other points in T □. Consequently, for a cycle in F □_19, we only take at most five points in K _7. So the cycle which can be formed in F □_19 are C_10 is one such example 1, a, 2, b, 3 c, 4 d, 5 e, 1. C_10 cycle together with a point x forming wheel W_10 in F □_19, and W_10 is the largest. Means F □_19 not load W_12. So F_19⋡S_8 and F □_19⋡W_12. F_19 therefore also a critical graph for S_8 and W_12, so R (S_8, W_12)> 19 or R (S_8, W_12) ≥ | F_19 | + 1 = 20 (20 is the lower limit of R (S_8, W_12)). From the above discussion shows that there is a graph that order 19 down is critical for S_8 graph and W_12. So, 20 is the lower limit of the biggest R (S_8, W_12) or R (S_8, W_12) ≥20.

Discussions

This study determines the lower limit for the Ramsey number of orders fulfilled star graph against the wheel of the order of odd namely R (S_8, W_12). Determining the lower limit R (S_8, W_12) carried by the lower limit and Harary. Limit Chavatal

down given by Chavatal and Harary (1972), Let χ (W_ (n + 4)) is the chromatic number of a graph wheel point W_ (n + 4) and C (S_n) is the cardinality of the largest component of the graph S_n is R (S_n, W_ (n + 4)) ≥ (χ (W_ (n + 4)) - 1) (C (S_n) -1) +1.

The method used in this study, namely, the lower limit of the graph Ramsey numbers containing two color wheel star and critically analyzed by constructing a graph based on the lower limit Chavatal-Harary.

Conclusions and Suggestions

The lower limit is obtained for Ramsey numbers Order star graph even against the wheel of the order of odd and larger than the star-order difference of five, and greater than the lower limit given by Chavatal-Harary. The advice given is for researchers who want to conduct research related to the problem that includes Ramsey numbers of stars and the wheel can continue the research with another order.

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Determination of Lower Boundary Ramsey Numbers Graph of Star S_8 on Wheels W_10

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ABSTRACT

For any graph G and H, Ramsey numbers R (G, H) is the smallest natural number n such that for every graph F with n point meets nature: F contains a graph G or the complement of F contains the graph H. This study aimed to determine the boundary Ramsey numbers on the graph star S_8 against the wheel W_10 or R (S_8, W_10). The determination based on the lower limit and the lower limit Chavatal Harary. The lower limit was given by Chavatal and Harary, for Ramsey numbers on the graph stars S_8terhadaproda W_10adalah R (S_8, W_10) ⩾ (⟦χ (W⟧ _10-1)) (c (S_8-1)) + 1 = 15, with χ (W_10) is the chromatic number, wheel graph point W_10 and c (S_8) was the cardinality of the largest component of the graph S_8. Based on the lower limit Chavatal and the constructed graph Harary critical to S_8 and W_10. It was greater than the lower limit value given Chavatal and Harary. Th order of the critical graph was a lower limit that was better than that given Chavatal and Harary. The results of this study were the order obtained lower limit was greater than the lower limit value given Chavatal and Harary, so it was known as R (S_8, W_10) ⩾19.

Keywords: Numbers Ramsey, star, and wheel.

Introduction

Some branches in graph theory including the Theory of Determination Ramsey numbers. Ramsey is one of the topics in the study of combinatory. The development starts from the basic idea that classical Ramsey numbers for positive integer n and m, Ramsey numbers m and n is the smallest positive integer R such that if the sides of the complete graph K_R is colored with two colors will be formed colored sub graph K_m or K_n. In other words, for any graph F with period R then Fakan load K_m or complement of Fakan load K_n.

Graf is the set of pairs (V, E) with V-called set point and E is the set of pairs of points called side. Many of them are associated side at a point and they are the degree of the point, and two points are called neighbors if a single hand links these two points. A graph called a complete graph if any two points on the graph neighbors.

Suppose G is a graph. Graf F is called the complement of G if every pair of points being linked by one side at F, if the couples the point is not linked by an edge in G. Based on the concepts of complement, the notion of two colors graph Ramsey numbers can be written as follows:

Given two numbers G and graph H. Ramsey graph G and H defines as the smallest natural number n such that every graph F with n points will load G or the complement of F involves H. Ramsey numbers graph G and H is denoted by R (G, H). The lower limit of Ramsey numbers R (G, H) is given by Chavatal and Harary (1972), namely R (G, H) ≥ (χ

(H) -1) (C (G) -1) +1, where χ (H) is a graph chromatic number of H and C (G) denotes the number of points on the graph is the largest component in the original numbers smallest K such that H colored K called chromatic number of a, denoted χ (H). As an example:

χ (C_n) = {(2 to n even @ 3 for odd n)}

χ (W_m) = {(3 to n is even @ 4 for n odd)}

The study of Ramsey numbers for the stars and several researchers have conducted the wheels. Before describing some of the results, first it is presented the notion of degrees, star graph, graph cycle, a bipartite graph and a graph wheels. The degree of a point is the number of edges associated with that point. Reviewed by n points is a tree that has a single point of degree n-1 and the other point of degree one. Graf wheel is a graph obtained by adding one point on the circle graph C_n, and connecting these points with all points on the circle graph is a bipartite graph G. Graf if only if every cycle in G have an even longer. Further definition of the critical graph is given graph g and H. A graph is called the graph of critical F to G and H, if F does not contain G and F □ not load H. Here are some researchers who have studied Ramsey numbers, particularly the star graph and wheels among others.

Baskoro et al (2002), examined $R(S_n, W_4) = 2n - 1$ for n odd and $R(S_n, W_4) = 2n + 1$ for n even, and $R(S_n, W_5) = 3n - 2$.

In the next year, Hasmawati (2003), examined the number of Ramsey is $R(S_n, W_m) = m + n - 2$ for m even dan n odd.

Furthermore, Chen et al (2004), examined $R(S_n, W_6) = 2n + 1$ for $n \geq 3$ in the same paper proved that $R(S_n, W_m) = 3n - 2$ for m odd and $n \geq m - 1 \geq 2$.

In the same year, Zhang (2004), examined the number of Ramsey $R(S_n, W_8) = 2n + 1$ for n odd and $R(S_n, W_8) = 2n + 2$ for n even.

In the next year, Korolova (2005), examined the number of Ramsey $R(S_n, W_4) = 3n - 2$ if $n = m, m + 1$ or $m + 2$.

Besides, Hasmawati (2007), proved $R(S_n, W_m) = 3n - 2$ for m odd, and $3 \leq m \leq 2n - 1$ and $R(S_n, W_m)$ for n odd and m even and $m = 2n - 2, 2n - 4, 2n - 6$ or $2n - 8$.

The recent findings was by Ahsan (2010), is $2n + 1 \leq R(S_n, W_8) \leq \frac{5(n-1)}{2}$ for $n \geq 11$, $n \equiv 3$ (mod 4)., in the same year Korani (2010), examined the number of Ramsey for the combined graph disjoint reviewed wheel against the order of seven, the result is $R(kS_n, W_6) = (k + 1)n + 1$ for $n \geq 4$ and $k \in N$ and if $n_i \geq n_{i+1}$ for $i = 1,2, \ldots, k - 1$ and $2n_k > n_{k-1}$, so $R\left(\bigcup_{i=1}^{k} S_{ni}, W_6\right) = R(S_{nk}, W_6) + \sum_{i=1}^{k-1} n_i$, for $n_i \geq 4$ for each i.

The results of literature studies show that the number of orders fulfilled Ramsey to star against the wheel of the order of odd yet to be found. In this paper assessed the determination of the lower limit for the star Ramsey numbers of order even against the wheel of the order of odd. The purpose of this study is to determine the lower limit for the graph Ramsey numbers star S_8 against the wheel W_10.

Research Method

The lower limit of the graph Ramsey numbers containing two colors wheel star

and critically analyzed by constructing a graph based on the lower limit Chavatal-Harary. The method used in this study was a literature study, using experimental data. The location of this study was conducted at the Hasanuddin University of Makassar.

Research Findings

The lower band number $\boldsymbol{R(S_8, W_{10})}$

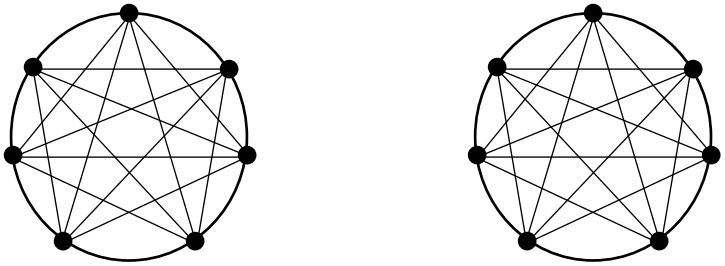
The following is the findings of the research:

Proposition:$R(S_8, W_{10}) \geq 19$.

Evidence

The lower band of Chavatal and Harary for $R(S_8, W_{10})$ is $R(G,H) \geq (\chi(H)-1)(C(G)-1)+1$. Example $G = S_8$ and $H = W_{10}$. Where $\chi(H) = \chi(W_{10}) = 3$ and $C(G) = C(S_8) = 8$. So it becomes $R(S_8, W_{10}) \geq (3-1)(8-1)+1 = 15$.

Pay attention to graph $F = (\chi(W_{10})-1)K_{C(S_8)-1} = 2K_7$ at the following picture.



K_7 Figure. 1. The graph of $\boldsymbol{F} = \overline{K_7}$,

The Graph F is regular graph of 14 or , $d_F(x) = 6$ for every x. While, at S_8, there is one point namely $d(u) = 7$. So, F do not involve S_8. The next, it was shown that the complement of F ($\bar{F}$) was also uninvolvedW_{10}. The complement of F is a complete bipartite graph $K_{7,7}$ atau $\bar{F} = K_{7,7}$. The type of $\bar{F}$ is the following figure:

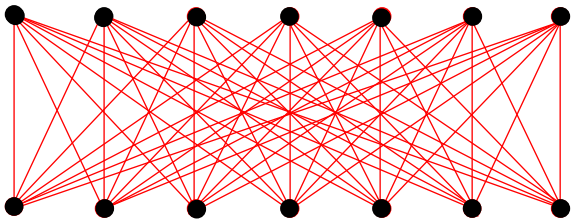


Figure 2. Graph $\boldsymbol{\bar{F} = K_{7,7}}$

Bipartite graph has an even cycle. Therefore, Graf F □ load cycles 4, 6, 8, 10, 12, and 14. But there is no point in F □ which could become the focal point W_10 wheel. Thus F □ not load wheel W_10. So F⋡S_8 and F □⋡W_10. Therefore, the graph is a graph F critical to S_8 and W_10, so R (S_8, W_10)> | F | = 14 or R (S_8, W_10) ≥15. The next presentation is a description of how to get a lower limit greater than the lower limit given by Chavatal and Harary for S_8terhadapW_10 graph. In the study showed a larger lower limit is

R (S_ (8) W_10) ≥19. Here the evidence obtained that 19 is the largest. Select a graph of the order of 18 call F_18 F_18 = K_7∪T ie, where T = 6-regular and | T | = 11. The structure is in figure below.

Graf F_18 = K_7∪T not load S_8 for each point x in F_18, d (x) = 6. While on S_8, there is one point called u with d (u) = 7. The complement of F_18 is K _7 + T or F □_18 □ _7 = K + T □ in Figure below.

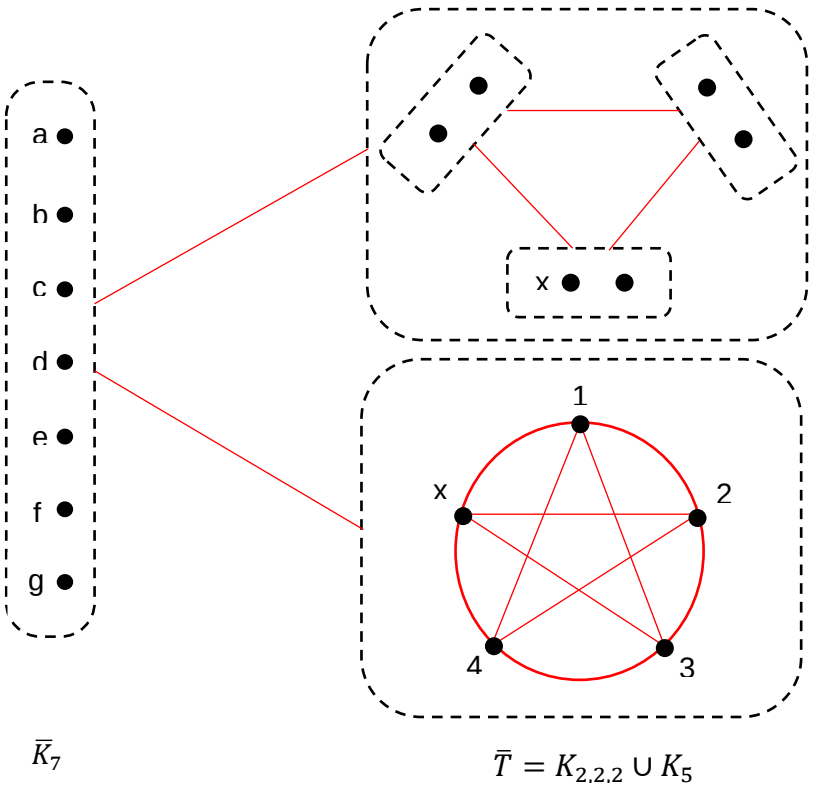


Figure 4. Graf $\bar{F}_{18} = \bar{K}_7 + \bar{T}$

Each point x in T □, d_T □ (x) = 4 and neighboring any point on K _7. Means any point x in T □, d_F □ (x) = 11. Since each point x in T □, d_T □ (x) = 4, then each point x in T □ neighbors with only four other points in T □. Consequently, for a cycle in F □_18, we only take a maximum of 4 points on K _7. So the cycle which can be formed in F □_18 is C_8 is one of them 1, a, 2, b, 3 c, 4 d, 1. C_8 cycle together with a point x forming wheel W_8 in F □_18, and W_8 is the largest. Means F □_18 not load W_10. So F_18⋡S_8 and F □_18⋡W_10. F_18 therefore also a critical graph for S_8 and W_10. So R (S_8, W_10)> 18 or R (S_8, W_10) ≥ | F_18 | + 1 = 19. Thus obtained R (S_8, W_10) ≥19.

Discussions

This study determines the lower limit for the Ramsey number of orders fulfilled star graph against the wheel of the order of odd namely R (S_8, W_10). Determining the lower limit was by the lower limit Chavatal and Harary. The lower limit given by Chavatal and Harary, for on wheel W_10 S_8 star graph is R (S_8, W_10) ≥ (W_10-1) (S_8-1) + 1 = 15, with χ (W_10) is a graph point wheel chromatic

number W_10 and c (S_8) is the cardinality of the largest component of the graph S_8. Based on the lower limit Chavatal and the constructed graph Harary critical to S_8 and W_ was greater than the lower limit value given Chavatal and Harary namely 18. The order of the critical graph is lower limit that is better than that given Chavatal and Harary.

Conclusion

The lower limit is obtained for Ramsey numbers order star graph even against the wheel of the order of odd and larger than the star-order difference of three, it was greater than the lower limit given by Chavatal-Harary. The advice given is for researchers who want to conduct research related to border issues under the load Ramsey numbers of stars and the wheel can continue the research with another order.

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Critical Thinking Skills of Students Senior High School Newton 'S Laws Materials and Application

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ABSTRACT

This study aims to describe the development of the Critical Skills Thinking Matter Newton's Law on Student SMAN 9 Makassar. To see the development of students' critical thinking skills seen from gain score of students before and after treatment. The results of inferential analysis showed significant differences between the experimental class (using model of Fostering Critical Thinking Skills/GCTS) the control class. This means GCTS learning model, can significantly raise high school students' critical thinking skills. Judging the amount of the effect (effect size), by calculating the difference between the average gain score critical thinking skills of students who are taught by learning model of GCTS of 0.26 and average critical thinking skills of students who are taught by without learning model of GCTS at 0.11 divided by the standard deviation the control group of 0.05. The result of the calculation is found that the magnitude of the effect of the use of the learning model of GCTS on learning of physics in order to foster critical thinking skills is 3:00 compared to learning without learning model of GCTS (control group). That is about three times larger than the average students' critical thinking skills that are taught without using model of GCTS. This indicates that the use of models of learning in the process of learning physics GCTS give effect to the development of students' critical thinking skills.

Keywords: Profiles, Critical Thinking Skills, Physics, interpretation, analysis, inference.

Introduction

Physics is a one of branch science. Underlying the development of advanced technology and harmonious living concept with nature. As science the study of natural phenomena, physics also give good lessons shown for mankind to review living in harmony based on natural law. On level Senior High School (SHS) is deemed important to review physics is taught as a separate lesson with several considerations. First, in addition to providing supplies to students of science, physics was intended as a vehicle to growing thinking skills that are useful to solve problems in everyday life. Second, the eyes should be taught physics lesson for review purposes more specific, i.e. equip students' knowledge, understanding and ability The required number for a review into the higher education level As well as developing science and technology. By Therefore, hearts Curriculum physics should have undertaken to review the growing ability of Thinking, Scientific work, being communication and as the prayer one important aspect of Life Skills (BSNP, 2006). Singer statement in line with the skills needed for the review to develop 21st Century Technology, i.e. cognitive skills, interpersonal skills, and interpersonal

skills. In this regard, Critical Thinking skills is seen as cognitive skills hearts interpretation, analysis, evaluation, inference, explain, and arrangements Yourself (Bailin, S., et al., 1999).

The above description shows that the critical thinking skills are skills that must be cultivated for students to be able competitive in the 21st century , but to spur the development of thinking skills , including critical thinking skills , students must develop process skills (BSNP , 2006). According Karamustafaoglu (2011), the development of science process skills enable students construct and solve problems and think critically. This possibility can occur because the components of critical thinking is largely a component of science process skills such as designing experiments, testing hypotheses, hypothesizing, predicting, inferring, classifying, measuring, observing (Hassard, J., 2005, p.332). Thus, if the students developing science process skills, then allegedly critical thinking skills they will develop. It is supported by the results of research Liliasari (2008) which states that the critical thinking skills can be developed through the development of science process skills.

Research Method

This study is a descriptive study to reveal the critical thinking skills of high school students. Providing critical thinking skills test to some high school students in the city of Makassar with the number of students as many as 200 people. Critical Thinking Ability Test (CTAT) of Physics prepared with the following steps: (i) Adapting the questions of the book Physics: Principles and problems bouquet Zitzewitz, P., W., et. al. Problems are adapted are the questions that correspond with the indicators of critical thinking skills, namely: interpretation, analysis, and inference, (ii) provide to some colleagues who set education undergraduate, masters, and doctoral degrees to validate readability (readability) matter physics critical thinking skills. The technique of collecting the data is Critical Thinking Ability Test (CTAT) of Physics to measure students' critical thinking skills include high level cognitive processes items, namely interpretation, analysis, and inference through scientific procedures in order to solve the problem. While the Data analysis technique used is quantitative descriptive techniques.

Results and Discussion

Results

Critical thinking skills test results Students are praying one objective Implementation of Learning Model of GCTS. Therefore, to see the development of critical thinking skills of students seen from gain score of students before and after treatment with GCTS learning model in this study. The gain score as test results of students' critical thinking can be seen in Table 1 below.

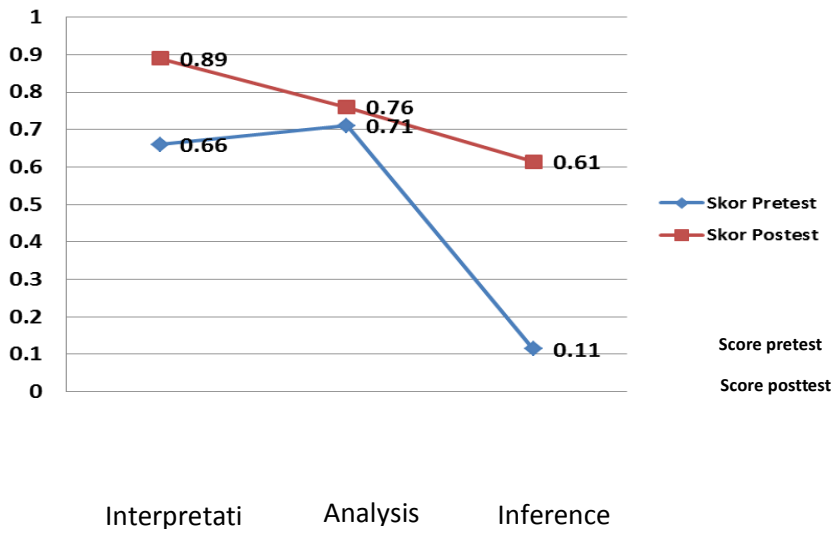
Table 1. Gain Score Test Results Critical Thinking Skills

Indicators Thinking Skills Critical	experiment class		control class	
	Score Pretest	Score Posttest	Score Pretest	Score Posttest
Interpretation	0.66	0.89	1.05	1.10
analysis	0.71	0.76	1.35	0.58
inference	0.11	0.61	0.57	1.63
Scores Average	0.49	0.75	0.99	1.10
Ideal score	27	27	27	27
Gain	0.36		0.07	
Index gain	low		low	

Table 1 shows an increase in the students' critical thinking skills, although still relatively low. However, on average the experimental class is higher increase, when compared with the control class.

Discussion

The test results of students' critical thinking skills is one purpose of the implementation of GCTS learning model. Therefore, to see the development of critical thinking skills of students seen from gain score of students before and after treatment with GCTS learning model. Table 4.9 shows that on average students' critical thinking skills that include interpretation, analysis, and inference progressing after following study by using model of GCTS in this study, i.e. from an average of 0.49 to 0.75 with an average the maximum that may be obtained by students is 3. In detail can be seen in chart 4 below.



Graph 1. The Test Results of Students' Critical Thinking Skills

Graph 1 shows that the index gain score it's still relatively low at 0.26. The low gain score, because the learning process is only performed during 4 meetings. This means that students still have little opportunity to learn critical thinking exercises. Though Perkins, Jay, & Tishman (1993), Halpern (1995), Samani, M. (2006), states that learning requires a lot of practice critical thinking and critical thinking skills to be used as a "thinking culture". Critical thinking skills should be taught continuously (Drost, 1998: 169). Therefore, to develop students' cognitive skills including critical thinking skills is not an easy job, it takes a long time to build and develop the skills (Nur, 1998). So students should be more involved with the objects of concrete, active students act and act as a scientist. Thus, students will be accustomed and trained as well as direct experience.

As mentioned previously, one based on Table 4.9 shows an increase in the students' critical thinking skills, although still relatively low. However, the average class taught using learning model of GCTS (experimental group) higher increase, when compared with the control class. To determine whether the difference is significant or not, then do inferential statistics. The results of inferential analysis by SPSS acquired asymp value sig (2-tailed) as the p-value. Because the p-value obtained for 0.004 $<\alpha$ = 0.05 (5%), it means that there are significant differences between the experimental class (using model of GCTS) with grade control. This means that the CBC Learning model, can significantly raise high school students' critical thinking skills. Judging the amount of the effect (effect size), by calculating the difference between the average gain score critical thinking skills of students who are taught by GCTS learning model of 12:26 and average critical thinking skills of students who are taught by without GCTS learning model at 0:11 divided by the standard deviation the control group of 0.05 (Joyce et al, 2011: 67). Top of FormThe result of the calculation is found that the magnitude of the effect of the use of GCTS learning model in teaching physics in order to foster critical thinking skills is 3.00 compared to learning without GCTS learning model (control group). That is about three times larger than the average students' critical thinking skills that are taught without using model GCTS. This indicates that the use of models of learning GCTS in the process of learning physics give effect to the development of students' critical thinking skills.

The big difference between students' critical thinking skills are taught through learning model of GCTS with without GCTS learning model: (i) allow students to read, think, and formulate their thoughts in writing so as to encourage students express his views by giving interpretations of a given problem, (ii) Students can identify as many as possible agendas of issues relevant to learning materials, so that they can choose one of the problems and is formulated in hypothetical form (temporary answer to the question problem), (iii) students to exchange ideas in small groups that can not only increase the interest of students, but also can improve critical thinking, (iv) provides the opportunity for students to interact, reflection, and feedback in solving problems or in the process of formative assessment so that they develop critical thinking skills especially reasoning, (v) students perform activities associated with moral responsibility, social values, the

benefits of science to science and human life, as well as the attitudes and actions such as curiosity, honesty, thoroughness, diligence, caution, tolerant, saving, critical and decision-making through activities authentic investigation. So students will be familiar with a set of procedures critical thinking, (vi) students perform interpretation and inference associated with the data results of the investigation group, resulting in increased skills of interpreting and inference students based on data and develop self-confidence.

The sixth reason mentioned above in accordance with the opinion of Kincaid (2004) states that the critical thinking skills can be developed through: (a) asking questions that encourage students to express their views and ideas, (b) provides the opportunity for students to discuss in an open-ended regarding important issues and prepare reason, (c) provide opportunities for students to take part in the cooperation, solve problems and make decisions, (d) directed learning on specific skills such as interpretation, analysis, and inference, (e) learning refers to the principles of logical thinking and give practice in identifying errors in expressing logical reasons. Associated with the model or learning methods and its relationship with the critical thinking skills, Bailin et al., say that "Critical thinking involves the ability to respond constructively to others during group discussion, which implies interacting in pro-social ways by encouraging and respecting the contributions of others (Lai, E.R., 2011, p. 34)." This is reinforced research Hall (2011) which states that the method of debate (discussion) can improve communication skills, improve critical thinking skills, problem solving, and develop self-confidence. Abrami say that "Positive and significant effect of collaborative learning for improving students' critical thinking skills and dispositions (Lai, E.R., 2011, p.35)." Collaborative learning effectively improve students' critical thinking skills.

Conclusions and Recommendations

Learning model developed to foster students' critical thinking skills. This can be seen in the average class taught using learning model of GCTS (experimental group) higher increase, when compared with the control class. The results of inferential analysis showed significant differences between the experimental class (using model of GCTS) with grade control class. This means that the GCTS Learning model, can significantly foster critical thinking skills of high school students. Judging the amount of the effect (effect size), by calculating the difference between the average gain score critical thinking skills of students who are taught by learning model of GCTS of 12:26 and average critical thinking skills of students who are taught by without learning model of GCTS at 0:11 divided by the standard deviation the control group of 0.05. The result of the calculation is found that the magnitude of the effect of the use of GCTS learning model in teaching physics in order to foster critical thinking skills is 3:00 compared to learning without learning model of GCTS (control group). That is about three times larger than the average students' critical thinking skills that are taught without using model of GCTS. This indicates that the use of models of learning of GCTS in the process of learning physics give effect to the development of students' critical thinking skills.

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Early Childhood & Primary Education:

The Relationships of Job Stress, Job Satisfaction and Organizational Commitment in Private Primary School Teachers in Indonesia

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ABSTRACT

The main purpose of this study was to examine the relationships of job stress, job satisfaction and organizational commitment in private elementary school teachers in Indonesia. The subjects were 584 private elementary school teachers drawn from the population of all private elementary school teachers in Makassar City of Indonesia. The "Teachers Job Stress Scale" (TJSS), the "Teacher Job Satisfaction Scale" (TJSAS) and the "Organizational Commitment Scale" (OCS) were conducted. The findings were as follows (1) Private primary school teachers of Makassar City in Indonesia perceived a below-average level of intensity of job stress. There were significant differences in level of intensity of job stress among teachers with some different personal background, (2) Private primary school teachers of Makassar City in Indonesia perceived an above-average level of intensity of job satisfaction. There were significant differences in level of intensity of job satisfaction among teachers with some different personal background, (3) Private primary school teachers of Makassar City in Indonesia perceived an above-average level of intensity of organizational commitment. There were significant differences in level of intensity of organizational commitment among teachers with some different personal background, and (4) there were significant correlations among job stress, job satisfaction and organizational commitment in private primary school teachers of Makassar City in Indonesia. Job stress has an indirect influence on organization commitment through the mediating effect of job satisfaction in private primary school teachers.

Keywords: job stress, job satisfaction, organizational commitment, private primary school teachers in Indonesia.

Introduction

Now, work plays many roles in our daily life: first, it is very important in people's life, as it occupies a lot of their time, and it is a source of financial stability; however, it brings us a source of great deal of stress (Nagar, 2012). However, the high esteem role of teachers has made teaching profession to be extremely challenging and demanding. According to Craig, et al. (1998), strategies must begin at the teacher level and be aimed at helping each teacher facilitate change in the classroom. Just as the success of each school is the key to overall quality improvement in the education system, the success of teacher development within the school must be aimed at the success of each teacher to help children learn.

It can't be neglected that motivated employee feel more satisfaction and consistency and don't incline to leave or change their work place. The views of the

employee about job satisfaction and commitment also depend on organizational behaviors and performance of human resource management. According to Rehman, et al., (2013) job satisfaction is a crucial problem for all organization no matter whether in public or private organizations or working in advanced or underdeveloped countries. According to Salim, et al., (2012), an educational system that is sound is usually considered to be the bedrock of a developing country. Quality teachers are indispensable for the attainment of such educational system. Therefore, teachers who feel satisfied with their jobs usually have a high degree of professional competence and also, they feel secured about classroom management so their jobs can running well.

For the reason that school climate and atmosphere, including innovation teaching, lifelong learning, parents communication, colleague collaboration, students' assistance in life and in schooling…etc. play as key factors influencing educators job satisfaction and job stress. Take it for example, the assessment of judgment a teacher gives toward the organization where he/she works actually provides the insights, the feeling, the actions for the teacher's daily life teaching and administrative accomplishment in the school, and further, it will bring the teacher to make future carrier plan for whether to stay or leave in the school/organization. According to Hasan (2014), there is a significant difference between the level of occupational stress of government and the one of private primary school teachers. The private primary school teachers are found to have significantly more job and related stresses than the ones of their government primary school teacher counterparts.

Psychologically, they feel a sense of inferiority and gradually they show low performance when teaching. Therefore, they are considered as not being competent nor not successfully in teaching, learning and guiding students. Furthermore, for the smaller fee or lower salary compared with other teachers also make them feeling being underestimated by school or by outside environment. Day by day, those teachers would make decisions for searching for another better job and they don't want to contribute time and efforts in their original school.

Some researchers found that there was a negative and significant correlation between job stress and job satisfaction (Ahsan, Abdullah, Fie, Alam, 2009; Akomolafe and Ogunmakin, 2014; Cooper., Rout., faragher, 1989; Kyriacou., Sutcliffe, 1978; Nagar, 2012). Meanwhile, a study in Indonesia revealed that there was a negative and significant correlation between job stress and job satisfaction (Suhanto, 2009). There was a negative and significant correlation between job stress and organizational commitment (Invancevich. Matteson, 2001; Iqbal. Ehsan, Rizwan, Noreen, 2014; Jamal, Hasan, Raheem, 2007; Khatibi, Asadi, Hamidi, 2009). There was a positive and significant correlation between job satisfaction and organizational commitment (Chugtai. Zafar, 2006; Fresko. Kfir and Nasser, 1997; Harrison. Hubbard, 1998; Iqbal, Ehsan, Rizwan, Noreen, 2014; Jamal, Hasan. Raheem, 2007; Jermier, Berkes, 1979; Kumar, Patnaik, 2004; Nuri, 2013). Meanwhile, a study in Indonesia revealed that there was a positive and significant correlation between job satisfaction and organizational commitment (Kandida, 2013; Muhadi,

2007; Sudiro, 2009; Zora, 2010).

The word stress has been given many different meanings by researchers. It is therefore difficult to assign one specific meaning to the word (Emulti, Kathawala, Chawla, 1991). According to Abul (2004) in organizational context, occupational stress is also teacher stress or work stress or job stress. These terms are often used interchangeably in organizations, but its meaning refers to the same thing (Kayastha and Kayastha, 2012). According to Lu (2008) teachers' job stress is when teachers are in their workplace, may face individual interaction and the external environment, individuals have negative emotional responses, produce anxiety, and feelings of psychological depression. Song (2010) also defined that teachers' job stress is when the teachers are in an interactive process of the working environment, unable to adapt, finally resulting physical imbalance and psychological oppression, and negative emotions and behaviors. Based on these descriptions, it can be concluded that teacher job stress described as condition or situation at work or about their teaching profession that leads to excessive demands resulting in physiological and psychological distress.

Job satisfaction is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs (Spector. 1997), and have positive feeling about a job which resulting from an evaluating of work characteristic (Judge, et al 2001). In the other hand, Kim, et al. (2005) defined job satisfaction as the feelings or a general attitude of the employees in relation with their jobs and the job components such as the working environment, equitable reward, and communication with colleagues. Can be concluded that teacher job satisfaction is an attitude or emotional state of a person about satisfied or not in relation with their jobs as a teacher and the job components such as the working environment, equitable reward, communication with colleagues and the fulfillment of all requirements in a fair and decent.

Meyer and Allen (1991) defined organizational commitment as "psychological state that (a) characterizes the employee's relationship with the organization and (b) has implications for the decision to continue membership in the organization" (Nuri, 2013). Mathieu and Zajac (1990) also defined organizational commitment as a psychological link between the employee and his/her organization, organizational commitment has been found to be related to major work outcomes, namely, turnover intention and actual turnover. Thus, Organizational commitment with regard to existing conditions in psychologist that everyone where psychological conditions that determine the level commitment owned organization (Mathieu and Zajac, 1990; Meyer and Allen, 1991). Based on previous studies of description definition of organizational commitment, it can be concluded that teacher organizational commitment as a psychological link between the teacher and his/her workplace to gives his own assessment toward workplace or organization where they work to determine and provide a decision whether to stay (to continue) or leave the organization.

With the globalization and internalization, job stress increasingly influences teachers' teaching and daily life. Job stress, job satisfaction and organization commitment serves as a very practical and substantial issue in this knowledge-based economy age. There is a need to investigate

the interrelationship among these three variables in Indonesia. Hopefully, based on the results of this research, strategies for reducing teachers' job stress and practices for enhancing school climate and teachers' organizational commitment will be proposed to government and educator in Indonesia. Based on the review of literature there were four main expectations.

Hypothesis 1. Private primary school teachers of different personal background perceive different level of intensity of job stress.

Hypothesis 2. Private primary school teachers of different personal background perceive different level of intensity of job satisfaction.

Hypothesis 3. Private primary school teachers of different personal background display different level of intensity of organizational commitment.

Hypothesis 4. Job stress has an indirect influence on organization commitment through the mediating effect of job satisfaction in private primary school teachers.

Methodology

Population and Sample

The population of this study was all teachers of private primary schools in Makassar City, Indonesia. The subjects of this study were 584 private primary school teachers randomly drawn from four areas of districts in the population.

The Instruments

In this study, job stress refers to the scores which the subjects acquired in the "Teacher Job Stress Scale" (TJSS) which was developed by the researcher referring to relevant literature (Kyriacou and Sutcliffe, 1978; Travers and Cooper, 1997; Kyriacou, 2001). There are five subscales in TJSS: (1) Job Burden; (2) Abilities for Job; (3) Interpersonal Relationship; (4) Role Conflict; (5) Students Performance.

Job satisfaction refers to the scores which the subjects acquired in the "Teacher Job Satisfaction Scale" (TJSaS) which was developed by the researcher referring to relevant literature (Robbins, 1988; Herzberg and Grigaliunas, 1971). There are five subscales in TJSaS: (1) Faculty and Staff; (2) Promotion; (3) Principal; (4) The Job; (5) Salary.

Organizational commitment refers to the scores which the subjects recieved in the "Teacher Organizational Commitment Scale" (TOCS) which was developed by the researcher referring to relevant literature (Meyer and Allen, 1991; Tahere., Zahra., Fatemeh., Asma, 2012; Nuri, 2013). There are five subscales in TOCS: (1) Feeling Proud of the School; (2) Pursuing Goal at the School; (3) Loyalty to the School; (4) Sense of Belonging to the School; (5) Career Developement at the School.

Data Treatment

The statistical procedures are descriptive such as average, standard deviation, multivariate analysis of variance (MANOVA), univariate analysis of variance (ANOVA), including Pearson product moment correlation, canonical correlation and AMOS (Analysis of Moment structure) to obtain results. The following statistical procedures were performed in data analysis:

Procedures 1. Calculating the means and standard deviation of the scores of Job Stress Scale (JSS), Conducting 6 MANOVAs, by using different personal background as independent variables respectively and the scores of 5 subscales in TJSS as dependent variables, to test hypothesis 1.

Procedures 2. Calculating the means and standard deviation of scores of the Job Satisfaction Scale (JSaS). Conducting 6 MANOVAs, by using different personal background as independent variables respectively and the scores of 5 subscales in TJSaS as dependent variables, to test hypothesis 2.

Procedures 3. Calculating the means and standard deviation of the scores of Organizational Commitment Scale (OCS). Conducting 6 MANOVAs, by different personal background as independent variables respectively and the scores of 5 subscales in TOCS as dependent variables, to test hypothesis 3.

Procedures 4. Conducting Structural Equation Modeling analysis, by using Job Stress as predictive variables, Job Satisfaction as mediator variable and Organizational Commitment as criterion variable, to test hypothesis 4.

Results

Hypothesis 1. Using different personal background as independent variable and the scores of the five subscales in TJSS as dependent variables, a MANOVA was conducted. The result indicated that there was significant difference in overall response toward these five subscales between teachers of different gender, Λ= .970, F (5,578) = 3.555, p= .004＜.05 , η2= .030. There was no significant difference in overall response toward these five subscales between teachers of different marital status, Λ= .973, F (10, 1154) = 1.609, p= .099＞.05, η2= .014 (Table 4-6). There was no significant difference in overall response toward these five subscales among teachers of different age, Λ= .970, F (15, 1590) = 1.161, p= .296＞.05, η2= .010 (Table 4-8). There was no significant difference in overall response toward these five subscales among teachers of different education background, Λ= .987, F (5,576) = 1.490, p= .191＞.05, η2= .013 (Table 4-10).

The means and standard deviations of job stress scores for private primary school teachers. It showed that the means of the scores of all the subscales in TJSS were significantly lower than the “expected value” of these subscales. The item mean of the subscale of “Job Burden” was highest (2.81), and then the item means of the subscales ranked in the order of “Student Performance” (2.76), “Abilities for Job” (2.69), “Role Conflict” (2.62) and “Interpersonal Relationship (2.60)”. It indicated that private primary school teachers perceived a below-average level of intensity of job stress.

Hypothesis 2. Using different personal background as independent variable and the scores of the five subscales in TJSaS as dependent variables, a MANOVA was conducted. The result indicated that there was no significant difference in overall response toward these five subscales between teachers of different gender, Λ= .994, F (5,576) = .663, p= .652＞.05, η2= .062. There was no significant difference in overall response toward these five subscales between teachers of different marital status, Λ= .979, F (10, 1150) = 1.205, p= .283＞.05, η2= .010 (Table 4-20). There was significant difference in overall response toward these five subscales among teachers of different age, Λ= .951 , F (15, 1584) = 1.927, p= .017＜.05, η2= .016. There was no significant difference in overall response toward these

five subscales among teachers of different education background, Λ= .989, F (5,576) = 1.293, p= .265>.05, η2= .011 (Table 4-26).

The means and standard deviations of job satisfaction scores for private primary school teachers. It showed that the means of the scores of all the subscales in TJSaS were significantly higher than the "expected value" of these subscales. The item mean of the subscale of "The Job" was highest (4.56), and then the item means of the subscales ranked in the order of "Faculty and Staff" (4.41), "Supervision" (4.36), "Promotion" (4.29) and "Salary" (3.83). It indicated that private primary school teachers perceived an above-average level of intensity of job satisfaction.

Hypothesis 3. Using different personal background as independent variable and the scores of the five subscales in TOCS as dependent variables, a MANOVA was conducted. The result indicated that there was no significant difference in overall response toward these five subscales between teachers of different gender, Λ= .988, F (5,576) = 1.414, p= .217>.05, η2= .012. There was significant difference in overall response toward these five subscales between teachers of different marital status, Λ= .966, F (10, 1150) = 2.026, p= .028<.05, η2= .017 (Table 4-39). There was significant difference in overall response toward these five subscales among teachers of different age, Λ=.955, F (15,158) =1.786, p =.032<.05, η2= .015. There was no significant difference in overall response toward these five subscales among teachers of different education background= .997, F (5,576) = .298, p= .914>.05, η2=.003

The means and standard deviations of organizational commitment scores for private primary school teachers. It showed that the means of the scores of all the subscales in TOCS were significantly higher than the "expected value" of these subscales. The item mean of the subscale of "Loyalty to the School" was highest (4.44), and then the item means of the subscales ranked in the order of "Sense of Belonging to the School" (4.39), "Feeling Proud of the School" (4.34), "Pursuing Goals at the School" (4.30) and "Career Development at the School" (4.29). It indicated that private primary school teachers perceived a above-average level of intensity of organizational commitment.

Hypothesis 4. The initial model of the structural equation modeling of job stress, job satisfaction and organizational commitment in private primary school teachers was established as Figure 1. It consists of three latent variables: (1) job stress, as independent variable; (2) job satisfaction, as mediator variable; (3) organizational commitment, as dependent variable. Job stress consists of five observed variables: (1) job burden (St1); (2) abilities for job (St2); (3) interpersonal relationship (St3); (4) role conflict (St4); (5) student performance (St5). Job satisfaction consists of five observed variables: (1) faculty and staff (Sa1); (2) promotion (Sa2); (3) supervision (Sa3); (4) the job (Sa4); (5) salary (Sa5). Organizational commitment consists of five observed variables: (1)feeling proud of the school (Or1); (2)pursuing goals at the school (Or2); (3)loyalty to the school (Or3); (4)sense of belonging to the school (Or4); (5)career development at the school (Or5). Each of the 15 observed variables respectively has an error variable: e1-e15. Each of the two internal latent variables, "Job Satisfaction" and "Organizational Commitment", respectively has an error variable: r1-r2.

The external lateral variables, "Job Stress" has no error variables.

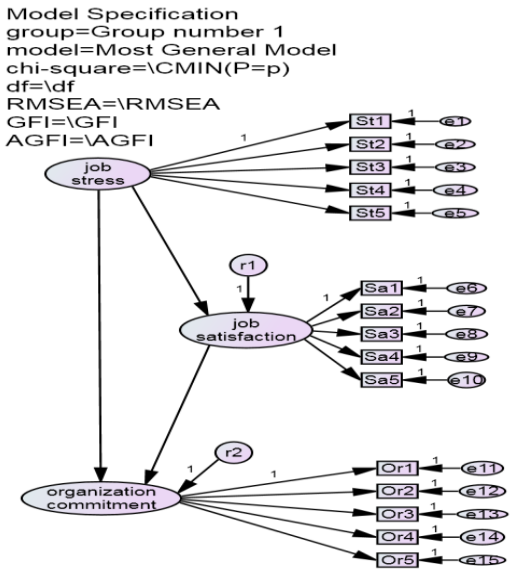

Figure 1. The initial model of the structural equation modeling of job stress, job satisfaction and organizational commitment in private primary school teachers.

Table 2 displays the standardized estimate of direct and indirect effects of job stress satisfaction on organizational commitment. It showed that the direct effect of job stress on job satisfaction was low, β= -.241. The direct effect of job stress on organizational commitment was approaching to zero, β= -.086. The direct effect of job satisfaction on organizational commitment was above median, β= .736. The indirect effect of job stress, through the mediating influence of job satisfaction, on organizational commitment was higher than direct effect, β= -.178.

The above results indicated that job stress tended more to have an indirect effect, through the mediating influence of job satisfaction, on organizational commitment.

Table 1. Standardized Estimate of Direct and Indirect Impact of Job Stress and Job Satisfaction on Organizational Commitment

Effect		Job Stress	Job Satisfaction
Job Satisfaction	Direct	-.241	
	Indirect		
	Total	-.241	
Organizational Commitment	Direct	-.086	.736
	Indirect	-.178	
	Total	-.264	.736

Discussion

First Hypothesis indicated that there was significant difference in overall response toward the five subscales in TJSS but no significant difference in the scores of the five separated subscales between teachers of different gender. The previous studies revealed that there was significant difference in job stress between teachers of different gender (Peltzer et al., 2009; Platsidou, Agaliotis, 2008; Whitehead, 2001).The results of this study is partly consistent with the above studies.

There was no significant differences in overall response toward the five subscales in TJSS between teachers of different marital status. The results of this study is inconsistent with the study of Soubhari, Kumar, (2015), who found there was significant difference in job stress between teachers of different marital status. Soubhari, Kumar, (2015), found that most of respondents who claim to be single do not feel much stressed as they can afford to accept any amount of workload. 92% of the singled respondents accept that they have greater freedom to contribute towards the institution as they do not have any family interference. From their result studies, it imply that marital status is probably the important issue that occurred in the field of their studies. Logically we know that single people have a feeling free and do not feel a lot of stress because they have greater freedom to contribute to an institution because they do not have a family disorder, compared with people who already married. The result of this study is inconsistent with the previous researches. It indicates that single people and married cannot be inferred that they have the same perception towards their work.

There was no significant differences in overall response toward the five subscales in TJSS among teachers of different age. Much young age teachers are more sensitive to the occupational stress because they tend to compare this job with other jobs which give more pay package, compare with old age teachers they are overburdened with the work assigned and cannot afford taking it partly home because of their family interference in jobs.

There was no significant differences in overall response toward the five subscales in TJSS among teachers of different education background. May due to the teachers with different education background do not had felt stress toward their job, they are able to cope with the difficult working condition, they realize their responsibility to solve the conflict in the school, and they are able to cope with the working burden and various behaviors of the students'. This means that regardless among teachers of different education background whether teachers are stressed or not stressed with their current job, it does not affect the perceived level of intensity of job stress. It also depends on where they work because each workplace certainly has its own policy in making the rules. Therefore, hypothesis 1 was rejected.

Second Hypothesis there was no significant differences in overall response toward the five subscales in TJSAS between teachers of different gender. Some of the previous researchers found that females show higher levels of job satisfaction as compared to men (Nagar, 2012). It can be seen that there is significant between job stresses with different gender. But, apparently the result of this study said otherwise. One of item questionnaire: "I am satisfied with my current salary" female teachers replied agree that indicate they are satisfied with the salary that was obtained, but not

necessarily with a male teacher said the same thing because they have more responsibility with their family, but they may replied agree because his responsibility be assisted by the family or the salary that was they get is satisfactory.

There was no significant differences in overall response toward the five subscales in TJSAS between teachers of different marital status. Sense of satisfaction will vary depending on how they give the perception to their work. The modern world as it is now between the single and married teachers have the same needs and responsibilities, married teachers have responsibilities for his family, but may single teachers also have a responsibility to help their families other than own selves. So it indicates that single people and married cannot be inferred that they have the same feeling satisfied towards their work.

There was significant difference in overall response toward the five subscales in TJSAS and significant differences in scores of "Faculty and Staff" and "Promotion" among teachers of different age. Some of prior research revealed that there was significant difference in job satisfaction among teachers of different age (Chaudhry, 2012; Gesinde and Adejumo, 2012; Kumar, Giri, 2009; Nagar, 2012; Platsidou, Agaliotis, 2008). The results of this study is partly consistent with the above studies.

There was no significant differences in overall response toward the five subscales in TJSAS among teachers of different education background. The findings of this study inconsistent to the study by Gesinde and Adejumo, (2012), who found that there was a significant difference on the basis of educational qualification, this is show that there is effect of educational qualification on job satisfaction. But, apparently the result of this study said otherwise. Therefore, hypothesis 2 was rejected.

Third Hypothesis there was no significant differences in overall response toward the five subscales in TOCS between teachers of different gender. Now, women teachers display higher commitment than men. But it does not mean teachers that men do not have commitment, Nowadays many of male teachers decide to pursue a career in one workplace to help his family life and responsibilities toward their family. It also depends on where they work because each workplace certainly has its own policy in making the rules, so that the teachers decided to stay working or not. There was significant difference in overall response toward the five subscales in TOCS but no significant difference in the scores of the five separated subscales between teachers of different marital status. The previous studies revealed that there was significant difference in organizational commitment between teachers of different marital status (Tang, 2008; Eslamdost, Mirjamali, Yousefi, Abedimahzoun, 2014). The results of this study is consistent with the previous studies.

That there was significant difference in overall response toward the five subscales in TOCS and significant differences in scores of "Feeling Proud of the School" among teachers of different age. The previous studies revealed that there was significant difference in organizational commitment among teachers of different age (Balay, 2007; Tang, 2008; Kumar and Giri, 2009; Tabbodi, 2009; Nagar, 2012; Eslamdost, Mirjamali, Yousefi, Abedimahzoun, 2014). The results of this study is consistent with the above studies.

There was no significant differences in overall response toward the five subscales in TOCS among teachers of different education background. Teachers with higher education qualifications cannot be concluded to have high organizational commitment. Because now teachers who have higher educational qualifications tend to find a school that is in accordance with the level of their education, including higher salaries, compare with teachers who not higher educational qualifications more has a high organizational commitment. This means that regardless among teachers of different education background whether teachers are have higher education qualifications or not, it does not affect the display level of intensity of organizational commitment. It also depends on where they work because each workplace certainly has its own policy in making the rules. Therefore, hypothesis 3 was partly accepted.

Forth Hypothesis showed that the direct effect of job stress on job satisfaction was low; that the direct effect of job stress on the organizational commitment was approaching to zero; that the direct effect of job satisfaction on the organizational commitment was above median; and that the indirect effect of job stress, through the mediating effect of job satisfaction on, on organizational commitment was higher than direct effect. The above results of this study revealed that job stress has an indirect influence on organization commitment through the mediating effect of job satisfaction in private primary school teachers. Therefore, hypothesis 4 was accepted. The results of this study is consistent to the study by Elangovan (2001), who revealed that job stress has an indirect influence on organization commitment through the mediating effect of job satisfaction in private primary school teachers.

Conclusions

Conclusions were drawn that private primary school teachers of Makassar City in Indonesia perceived a below-average level of intensity of job stress. There were significant differences in level of intensity of job stress among teachers with some different personal background. Private primary school teachers of Makassar City in Indonesia perceived an above-average level of intensity of job satisfaction. There were significant differences in level of intensity of job satisfaction among teachers with some different personal background. Private primary school teachers of Makassar City in Indonesia perceived an above-average level of intensity of organizational commitment. There were significant differences in level of intensity of organizational commitment among teachers with some different personal background. There were significant correlations among job stress, job satisfaction and organizational commitment in private primary school teachers of Makassar City in Indonesia. Job stress has an indirect influence on organization commitment through the mediating effect of job satisfaction in private primary school teachers.

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Reading, Writing, and Arithmetic Learning For Early Childhood Risk at Hampering Children Mentality

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ABSTRACT

This paper aimed to examine and analyze the impact of learning "calistung" (reading, writing, and arithmetic) for early childhood that risk to hamper children's mental health. Early Childhood Education was education before primary education as well as one form of education organization that focuses on the foundation of physical growth and development namely motor coordination and intelligence including thought, creativity, emotional intelligence, spiritual intelligence, socio emotional conditions as well as language and communication. This study used content analysis and literature review on learning calistung risks that could hinder the children mental health. Some elementary school or equivalent, impose reading, writing and numeracy tests for prospective students. It is encouraging formal Early Childhood Education applies a kind of learning that can produce students who can read, write and count. Children need a lot of time to grow and develop, because children need more playing at early age, not to learn formally; and teaching calistung at the early age has the potential to cause greater "damage" in the future. Calistung lessons indirectly prohibited to be introduced to children under 7 years old because it can inhibit the growth of mental intelligence of children. Thus, it is strongly advised that parents and teachers do not impose teaching calistung before the age of 7. Calistung can be applied through the introduction to the letter, the numbers with simple concept and gradually through educative play.
Keywords: early childhood education, calistung (reading, writing, arithmetic), mental aptitude

Introduction

Children are gift given by God to His people to be looked after and directed to the good and the best education. Inappropriateness in giving education to children will be able to cause problems and hamper their growth, development, and mentality.

Recently, the society is supported to be smart consumers. One of them is by selecting Early Childhood Education which does not teach reading, writing, and arithmetic. It is wrong if the parents choose Early Childhood Education which teaches reading, writing, and arithmetic. "Many parents are trapped when selecting Early Childhood Education. They assume that luxurious and expensive Early Childhood Education which teaches reading, writing, and arithmetic is a good school, "said the director of Early Childhood Education of National Education Ministry, Sudjarwo, in press conference in Suara Merdeka on Monday (9/9/2013). In addition to these cases, during early childhood, it is better if

parents or educators should not rush to teach reading, writing and arithmetic. If it is forced, children will be exposed to 'Mental Hectic'.

Mental Hectic is mental diseases which attack early childhood who were forced to learn reading, writing, and arithmetic. This disease will affect the children at the age of 8 or 9. Therefore, don't be proud if parents have children who can read, write, and count at the age of two or three. Therefore, early childhood teaching patterns will be put back on track. Since a good early childhood education is actually school that gives children the opportunity to play, without burdening the academic load.

According to Jensen's research in Kalyn (2007), that physical activity can promote the growth of new brain cells. Besides at break time, integrated physical activities help students engage simultaneously between the brain and their bodies in learning. The existence of a movement is an integral part of learning and thinking. During movement, the brain cells become fresher, so that it can trigger the growth of new brain cells and the development of nerve synapses (Blakemore, 2003).

According to research conducted by Santrock (2004), which affirms that early age, was known as the "golden age" which is in the process of children development. This period is called as the critical period of development which is also called the windows of learning, a time when children need specific stimulation. These golden moments will never occur twice. Therefore, this period is the best for children to obtain proper stimulation, because without the stimulation, the nerve cells (neurons) will disappear through natural processes, based on working principles of brain neurons (Stine, 2002).

Based on that case, the ideal stimulation during the golden age is playing. In essence, playing is one of the basic needs of early childhood development. If this need is not fulfilled, it will be difficult for them to achieve optimal development. Educative games can optimize the ability of children at an early age. Kids can go through a golden age with valuable activities and development of children can be taken naturally.

Based on the above quote from the research done by Anita (2011) phenomenon that often occurs in early childhood environment is precisely the golden age is used by teachers and parents to provide academic learning with competency enhancement program. Not a few students who take their pre-school learning by listening and writing tasks from teacher which are dominated with children worksheets and workbooks. Thus, cognitive or intellectual aspects obtain a larger portion rather than other aspects such as psychomotor and affective.

Other phenomena quoted from the research conducted by Istiyanti (2013) that the increase of competency in reading, writing and arithmetic in Pekalongan is done by holding regular private and regular courses in an institution. The activity has been followed since the child is in level A or at the age of 4 years. Perhaps, it is done by private institution because of selection to the Elementary Schools use reading, writing, and arithmetic test model. Ironically it is encouraging Early childhood education formally apply reading, writing, and arithmetic learning and giving domino effect continues in the family environment in which children under five since the beginning are demanded to follow the activities that lead on such matters .

National Education System No. 20 of 2003 regulating the Early Childhood Education (ECD). Calistung test ban rule for children who will enter elementary school is Government Regulation No. 17 of 2010 concerning the Management and Operation of Education. The Government Regulation refers to Article 5 verse (2) of the Constitution 45 and Law No. 20 Year 2003 about National Education System. In Paragraph 3, Acceptance of Students Article 69 states: Admission of students from grade 1 (one) SD / MI or other equivalent forms is not based on the results of reading, writing, and arithmetic tests, or other form of testing.

Theoretical Study

Early Childhood Education

According to the National Association in Education for Young Children (NAEYC), early childhood is a child in the age range of birth to the age of 8 years (Wikipedia, 2007). In Indonesia, the Directorate of Kindergarten and Elementary School OF National Education Department does not mention this aspect of development, but there are aspects of being included in the kindergarten curriculum. The development is progressive and continuous changes in the individual from birth to death. Syamsu (2006, 17) provides another definition of development, that is, changes experienced by an individual or organism toward maturity level that took place in a systematic, progressive and sustainable way, both related to physical and psychological aspects.

In the law on the national education system, it is stated that early childhood education (ECD) is a development efforts for children from birth to the age of six years which are accomplished through providing stimulation of education to help the growth and development of the physical and spiritual so that children have the readiness in entering further education (Act No. 20 of 2003 (Law on National Education System) Chapter I Article 1 Verse 14).

According to Sujiono (2009, 42-43), the objectives of Early Childhood Education are:

1. In order that children believe in God and are able to worship and love one another.
2. In order that children are able to manage their skills including gross motor movement and fine motor skills, and be able to receive sensory stimuli.
3. Children are able to use language for passive language comprehension and can communicate effectively so that it can be useful to think and learn.
4. Children are able to think logically, critically, reasoning, problem solving and finding a causal relationship.
5. Children are able to recognize the natural environment, social environment, the role of community, respecting social and cultural diversity, and are able to develop a positive self-concept and self-control.
6. Children have sensitivity

Mental Development of Early Childhood

Early education provides a very good long-term effect. Conversely, if the child is experiencing stress at an early age, it will also affect the growth of brain development. Children, who grew up in an environment with minimal stimulation, will reduce their intelligence for 18 months which may not be replaceable.

The human brain consists of two hemispheres, left and right which are

connected by a lump of fibers called corpus callosum. Both hemispheres have different function and response, and it should grow in balance. The left hemisphere mainly serves to think rationally, analytically, sequentially, linear, scientifically such as reading, language and numeracy. Right Hemisphere functions to develop imagination and creativity. If the implementation of learning in early childhood provides many lessons of writing, reading, language and numeracy as tends to happen nowadays, it will lead to the function of imagination in the right hemisphere neglected. Preferably, in an attempt to grow all the intelligence of children, learning in early childhood is focused on developing both hemispheres in harmony.

Calistung learning potentially causes mental hinders of children, one of which is often known is Mental Hectic when such activities cannot accommodate children learning ways. Mental Hectic actually exists only in Indonesia because there is no appropriate term to define it, and if it is defined as a condition where a person experiences mental turmoil. This condition is like someone's imbalance in feeling, perceiving, hearing, thinking, and acting, which ultimately resulted in the person has 'confusion ' that can ultimately lead to stress, depression, feeling intimidated, or feel threatened. Mental hectic can direct children to become defiant, disobedient, even ignoring all the information they receive.

The rigid and systematic learning process is the main factor of children experience "burnout". This repeated process finally makes their cognitive structures to be "chaotic ". The things which should be well developed, are even prevented, while the thing that is not their potential, is even forced to evolve.

Analysis and Discussion

In childhood, growth of brain at an early age greatly affects children development. After birth, the brain activity is influenced and dependent on the activity of nerve cells and their branches in forming connections between nerve cells. Through natural competition, connections that are not or rarely used will experience death. The good connection occurs when nerve cells receive information that is able to produce electrical ripples to form new nerve cells connections.

The quality of the brain's ability in absorbing and processing information is depending on the number of neurons that make up the units. Stimulation given early will affect brain development. The brain will grow if given more stimulation. Kids need to get an environment that stimulates the growth of the brain and always get psychosocial stimulation. Social stimulation can be given by touching and inviting children to play. If this is not obtained by the child, then the child can experience a variety of deviant behaviors. Examples of deviant behavior is the loss of self-image, low self-esteem, timid, not independent or otherwise children become aggressive and have no shame.

Based on the above explanation, one solution that children need to be trained in multiple intelligences they have, so that children can learn more effectively and be able to appreciate themselves. Armstrong (2003, 243-249) revealed that to train the multiple intelligence owned by children, it is necessary to pay attention to some of the following: use simple language, connect all the intelligence with children world, emphasize that children have all kinds of

intelligence, indicate a role model in children life, visit the places where the various intelligence are appreciated, use creative ways. Learning for young children is to play, so that, to train the multiple intelligence in early childhood, we must be creative in making a game that contains the value of education. Unfortunately, this time playing activities get less attention from early childhood educators. Early childhood already get a lot of assignments from their teachers at school, so that the form of early childhood learning are structured and formal, so the opportunity for children to learn while playing becomes very less. In fact, playing is the most effective means to be able to train the intelligence in early childhood.

According Bredekamp and Copple (1997), "The physical development of 3- through 5-years-olds should be considered throughout the learning environment and across the curriculum. Plans should provide for physical activity throughout the young children day. In any part of the curriculum, requiring too much sitting is at odds with young children's characteristic mode of learning through activity through moving, exploring, and acting on objects".

Essentially, all children love playing. This playing activities of children need to get more attention from parents and those who involve in early childhood education. Abdullah (2007, 26-27) reveals three important steps that become key considerations to train multiple intelligences of children, namely:

1. Seeing the children's ability to innovate.
2. The scientific method should be applicable to anyone.
3. The application of the selected method is done gradually, patiently and unhurried.

Playing has an important role in children development. Almost all areas will develop by playing, so that we need to create educative games to train children intelligence, in order that children can play while learn and it takes place unconsciously and without pressure from parents. According to Suyanto (2003, 135-137) many children development occurs by playing, such as:

1. Playing develops motor skills.
2. Playing develops cognitive abilities.
3. Playing develops affective abilities.
4. Playing develops language skills.
5. Playing develops social skills.

Misni (2006) revealed that playing is an activity undertaken by children with or without using tools that generate or provide information, give pleasure and develop children imagination spontaneously and without load. Usually children are playing with a "murmur", that is, expressing idea in their mind with the words. This process is known as thinking aloud, a thinking process known as internal speech in which children ask themselves, proven by doing experiment to the object, and the conclusions drawn by them to answer their own question. Because of the importance of playing for children's development, it is necessary to note the development of children in the playing itself.

In playing activities, actually children find the essential learning. Therefore, children should not be forced to learn, since playing is learning for children. Early childhood does not mean learning as well as adults. Early childhood is not always learn in order condition and a certain period, they prefer to study in a free state, learning without realizing that they are learning, learning in an atmosphere of playing.

Conclusion

Based on the above explanation, it can be concluded that the background of calistung learning among early childhood education is the lack of monitoring and demands of parents to put their children into primary school based on their choice, and they think that schools which organize entrance test is a good. So unwittingly, it could hinder children mental development, and potentially experience mental hectic that is a kind of disorder which result in children becoming dissidents, saturated and are not concerned with materials given by the teacher.

Conceptualized calistung learning force is one way to hamper development of children at an early age and inhibit the right brain development in children. If the right brain functions hampered, the creativity of children will disappear. Thus, the proper learning in early childhood education is playing.

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The Effect of Work Characteristics, Development and Motivation on Performance of Operator Basic State School in Jakarta

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ABSTRACT

The purpose of this study was to determine the effect job characteristic model, empowerment and motivation of job performance state elementary school operator in east Jakarta. This research tried to answer problems about job characteristic model with evidence increasing of service operator school. The research was conducted on job performance state elementary school operator in east Jakarta involving of 238 state elementary school operator had been selected from the target populations of 588 state elementary school operator by using quantitative approach with path analysis methods. The research of hypothesis testing show: (1) job characteristic model had a direct positive effect on job performance; (2) empowerment had a direct positive effect on job performance; (3) motivation had a direct positive effect on job performance; (4) job characteristic had a direct positive effect on motivation: (5) empowerment had a direct positive effect on motivation; to improve the job performance state elementary school operator in east Jakarta, need to increase job characteristic model, empowerment and motivation.

Keyword: Job characteristic, empowerment, motivation and job performance

Introduction

Law Number 20 Year 2003 on National Education System Article 6 paragraph 1menyebutkan that every citizen aged 7-15 years of compulsory basic education. Article 34 paragraph 2 states that government and local governments guarantee the implementation of the compulsory minimum level of basic education free of charge, whereas in paragraph 3 states that compulsory education is the responsibility of the state organized by the Government educational institutions, local governments, and communities. The consequences of these the mandate of the laws governments and local governments are required to provide educational services for all students at the level of basic education (primary and secondary) as well as other educational units equivalent.

School operator has a very important role in basic education data collection system, known as the Basic Education Data (Dapodik). Various educational policies such as disbursement of School Operational Assistance (BOS), teacher allowances and assistance for poor students is based on data that has been inputted by the operator of the school. Therefore, principals are expected to give full attention to them by providing the required data completeness. The statement was made by the Secretary of the Directorate General of Primary Education, Thamrin Kasman reminds the existence of schools in each school operator that is absolutely indispensable, it is proper to get more attention from the parties involved. Duties and responsibilities are so great is often not recognized its existence, ranging from basic data education (DAPODIK),

EMIS, reporting BOS Online, YOU STATE fact rarely there are some schools that teachers are many who cannot be with the laptop still relies school operator to complete duties. Under these conditions, it can be formulated research problem: Is there a direct influence on the performance characteristics of the work? Is there a direct influence on the performance of empowerment? Is there a direct influence on performance motivation? Is there a direct effect on the motivation of job characteristics? Is there a direct effect on the motivation of empowerment?

Performance is as a person's success in executing a job. Steve M.Jex (2002: 88) describes the performance i.e., "job performance is a deceptively simple term. At the most general level it can be defined simply as all the behaviors employees engage in while at work ". Performance by Steven M. Jex is a reflection of the behavior of employees in their work to achieve organizational goals. Jason A. Colquitt, J. Lepine, Michel J. Weson (2015: 32) defines the following performance, "Formally job performance is defined as the value of the set of employee behaviors that Contribute, either positively or negatively, to organizational goals accomplishment "Performance is generally the set of values that contribute to employee behavior positively or negatively to achieve organizational goals. Jason A. Colquitt says can be called if an employee's performance has been able to contribute to the organization in place he worked in the achievement of organizational goals. Jason A. Colquitt, Jeffery A. Lepine, Michael J. Wesson. Motivation (2015: 168), motivation is defined as a set of energetic force originating both inside outside or employees, started the effort that associated with the work and determine the direction, and perseverance. Fred Luthans (2011: 157) says, Motivation is a process that begins with physiological or psychological deficiency or need that activates behavior that is intended for trading purposes or incentive. Donald C. Mosley Jr., Donald C. Mosley Sr., Paul H. Pietri (2011: 195), Motivation is the willingness to work to achieve organizational goals. Identify the right job characteristics associated with a particular job has an important role related to the attitudes of employees in the organization. The terms of job characteristics according to Hackman and Oldham (2011: 4), "job characteristics is a set of environmental variables that are widely thought to be important causes of employee effect and behavior". Characteristics of the work is a series of environment variables which are widely considered to be essential that cause and affect job behavior. Many factors can affect a person's behavior in the work.

Richard L. Daft (2010: 271) defines empowerment as follows, "empowerment is power sharing, the delegation of power or authority to subordinates in an organization". Empowerment is the division of powers, devolution of power or authority to subordinates in an organization

Jason A. Colquitt, Jeffery A. Lepine, Michael J. Wesson (2015: 168) defines motivation as follows: "motivation is defined as a set of energetic forces that originates both within and outside an employee, initiates work related effort and Determine its direction, intensity and persistence ". Motivation is as a set of energetic force originating both inside and beyond the employee, starts a business related to the work and determine the direction, intensity and persistence.

Research Methodology

The population of the school was operator of Elementary School in East Jakarta. The sampling technique used was simple random sampling with the assumption that populations have the similar characteristics (homogeneous). The study was conducted in South Jakarta. This study uses a quantitative approach with survey method. The population were 588 operators. The sample was 258 employees that are taken randomly. Collecting data used questionnaires and analyzed using path analysis.

Research Findings

The path coefficients were analyzed according the research hypothesis that βy1, βy3, βy4, β41, β42, β43. The path coefficients exogenous variables of endogenous variable is characteristic of the job performance of 0.129; empowerment of 0.155; and motivation at 0.262. Structural equation model of sub-structure formed on the first form: Y = βy1X1 + βy2X2 + βy3X3 + ε1. With great R2y (123) = 0.1440 so ε1 = 0.925. So the form of structural equation model first sub-structure: Y = 0,129X1 + 0,155X2 + 0,262X3 + 0,925.

The path coefficients exogenous variables of endogenous motivation variable that is characteristic of the work amounted to 0,142 and 0,139 of empowerment. Structural equation model of sub-structures are formed on both the form: X3 = β31X1 + β32X2 + ε2. With great R23 (12) = 0.0483 so that ε2 = 0.976. So the form of structural equation model second sub-structure: X3 = 0,142X1 + 0,139X2 + 0.976.

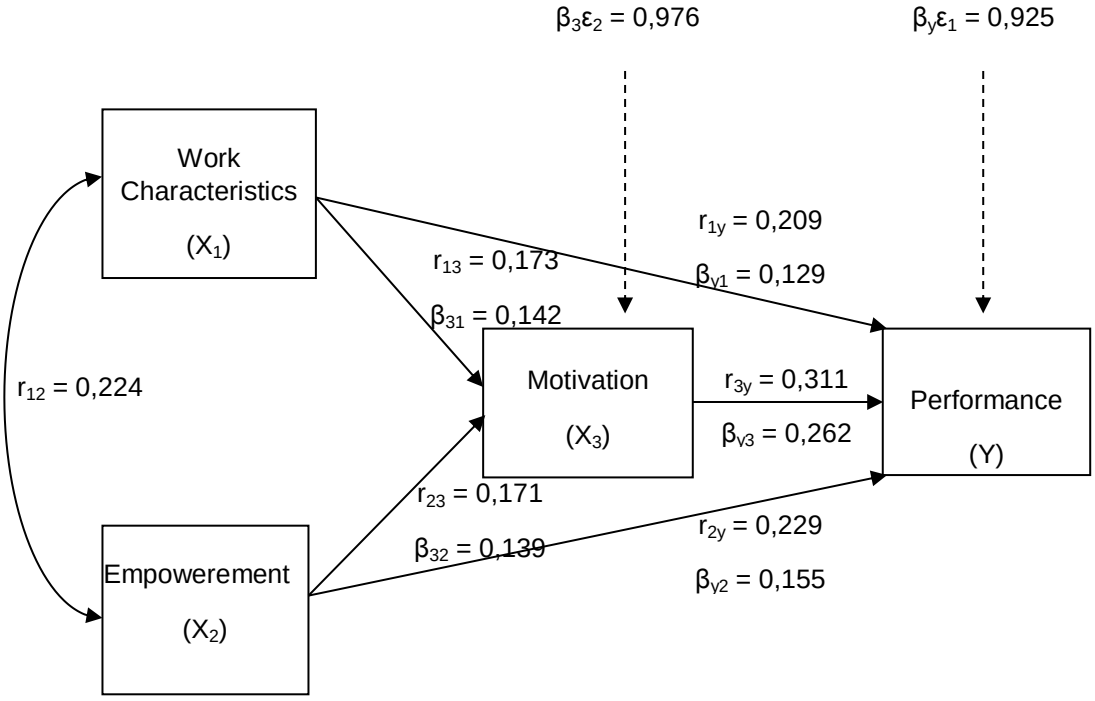

Figure 1. Diagram Late Model Line

The Path coefficient calculation results can be seen in the following table:

Table 1.Pengaruh Variable Direct Delivery

No.	Direct effect	Coefficient Line	dk	Tcount	ttable	
					α = 0,05	α = 0,01
1.	X1 toward Y	0,224	236	3,53 **	1,97	2,60
2.	X2 toward Y	0,142	235	2,17 *	1,97	2,60
3.	X3 toward Y	0,139	235	2,13 *	1,97	2,60
4.	X1 toward X3	0,129	234	2,06 *	1,97	2,60
5.	X2 toward X3	0,155	234	2,48 *	1,97	2,60

* = significant (tcount> ttable in α = 0, 05)

** = very significant (tcount> ttable in α = 0, 01)

The results showed (1) the characteristics of work positive direct effect on performance. (2) Empowering a direct positive effect on performance. (3) Motivation positive direct effect on performance. (4) The employment characteristics positive direct effect on motivation. (5) Empowerment of a positive direct effect on motivation.

Discussions

Based on the results of research conducted discussion raised the following research:

First, the empirical results found that there is a direct positive effect on the employment characteristics performance. Hackman and Oldham (2012: 219) seeks to provide a complete and accurate report on the effects of job design that is motivating, performance, job satisfaction and other important aspects of organizational behavior. "Hackman and Oldham further proposed that critical psychological states result in four key outcomes for employees and their organization; high intrinsic motivation, high job performance, high job satisfaction and low absenteeism and turnover ". Hackman and Oldham further proposed that psychological states are important in generating four main outcomes for operators and schools; high intrinsic motivation, high performance, high job satisfaction and low displacement school operator.

Second, the empirical results found that there is a direct positive effect on the performance of empowerment. Arnold (2005: 486) as follows: "empowerment; giving responsibility to the group members, setting high but realistic goals, offering instruction but avoiding playing the role of the great man. That use of empowerment by both leaders can help them get the performance they want from subordinates and subordinates Increase satisfaction with Reviews their leadership". Based on the above, the empowerment of giving responsibility to the group members, setting high but realistic goals that offers instruction but avoid playing the role of great man. The use of empowerment by the leader can help get the performance of school operators and increase operator satisfaction with the school leadership.

Third, empirical results found that there is a direct positive effect of motivation on performance. Douglas E. Mitchell (1997: 31) explains: "job performance is directly related to the level of energy and the specific form of action characterizing a worker's behavior. To the extent that motivation raises a worker's energy and shapes appropriate behavioral

patterns, it plays a key role in determining overall job performance. Thus, job performance can properly be said to represent an operational measure of worker motivation "Performance is directly related to the level of energy and specific form of action that characterize the behavior of workers. Further motivation for workers creates energy and shape the patterns of behavior that is appropriate, as playing a crucial role in determining the overall performance. The good performance can be said to be an operational measure of one's motivation at work.

Fourth, the empirical results found that there is a direct positive effect on the motivation of job characteristics. The results of this research in line with the opinion of several experts whom Henrigel, Slocum (2012: 171) that refer to the Job Characteristic models are suggested to increase the diversity of tasks, identity task, significant, autonomy and feedback in one's work rate characteristics of a person's work affects three the psychological state of a person. If the three psychological states is perceived positively, it will increase the motivation that comes from inside a person, "a job without meaningfulness, responsibility and feedback is incomplete and does not strongly motivate an employee". Work without meaning, responsibility and the feedback was not complete and did not provide a strong motivation.

Fifth, the empirical results found that there are significant positive direct empowerment of motivation. Jean Phillips, Stanley M. Gully (2010: 217), "empowerment can be an important management toll to Increase the motivation of many employees". Empowerment can be made an important management tool to increase the motivation of school operator.

Conclusion

Based on these results it was stated the following conclusions: (1) direct effect of job characteristics positively to performance. (2) Empowering a direct positive effect on performance. (3) Motivation positive direct effect on performance. (4) The employment characteristics positive direct effect on motivation. (5) Empowerment of a positive direct effect on motivation.

Implication

The implications of the results obtained from this study can be explained as follows: Job characteristics affect motivation and performance, to increase motivation and performance can be performed with a deeper understanding characteristics of the models work by: a) skill diversity. The level to which the job requires an individual who is able to perform a variety of tasks that require using different skills and abilities. b) Identity of the task. The extent to which a job requires completion of the whole process is part of the job identification. c) Meaning task. The extent to which substantially affect jobs or jobs in the life of the school operator. d) Autonomy. Level up in which a job provides freedom, independence and substantial flexibility for individuals in planning the work and determines the procedures that will be used to run the job. e) Feedback is the extent to which the implementation of the work activity makes an individual to get clear and direct information regarding the effectiveness of its work.

Empowerment affect motivation and performance, to increase motivation and

performance can be made by increasing empowerment by: a) the granting of autonomy, the school operator in planning and managing their work as well. b) Utilization of resources, principals can maximize all good human resources or infrastructure to support the establishment of a system that goes with in order) Increase participation. Principals can help increase participation of school operators to maximize its performance.

Motivation affects performance, to improve performance can be done by: a) the school should have been a realistic goal in the work, for the achievement of maximizing performance .b) to be driven to school had been planning in achieving goal in working c) The operator must be willing to accept feedback on the good work of principals and of teachers as colleagues. d) The school operator must have a great responsibility in doing this work can arise from within the operator itself or from outside the operator. e) The operator is willing to complete the task well with any circumstances, to the maximum operator attempted to show its performance in work. f) Work hard in completing the work should be instilled within themselves operator, since the operator is part of an educational system that will synchronic with the central government as operator education.

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Social Science Studies and Civics:

Method of Successive Interval in Community Research (Ordinal Transformation Data to Interval Data in Social Science Studies)

Sudirman Kadir

ABSTRACT

This paper seeks to explain the scale of measurement and the transformation of the ordinal scale to distance scale by using the Method of Successive Interval (MSI). In addition, in this paper demonstrated a statistical difference in the groups of test results before the data transformation and after transformation by using MSI. Using statistical tests on group data before and after transformation raises interpretation distinction. Oversight in selecting statistical test will lead to wrong interpretation as well. Therefore, it is required accuracy in selecting test statistic in a study. Data obtained from measurements using an ordinal scale should be tested with a non-parametric statistics. However, if you want to use parametric statistics, the transformation of the ordinal scale to scale the distance (interval) should be done first.

Key word: measurement, transformation, ordinal, interval, successive

Introduction

Data analysis is interpreted as an effort to process data into information, so that the characteristics or attributes of the data can be easily understood and will be helpful to answer the problems associated to the research activities. Thus, data analysis techniques can be interpreted as how to implement an analysis of the data, with a purpose to process the data into information. Therefore, the characteristics or attributes of the data can be easily understood and will be helpful to answer the problems that related to the research activities, either it is related to the data information or to make an induction, or draw conclusions about the population characteristics (parameters) based on the data from sample (Sudjana, 2005; Anas, S., 2008; Dajan, A., 2009: Garrett, H.E., 2007).

Data analysis techniques are divided into two, the descriptive data analysis techniques and inferential data analysis techniques. Data analysis techniques in descriptive study is done by descriptive statistics, the statistics used to analyze the data by describing or illustrating how the data were collected just as they are without the any purpose to generalize the findings. Included in the descriptive statistical data analysis techniques are presenting data in tables, diagrams, frequency, and percentages. Meanwhile the techniques of data analysis are done by statistical inferential, where the statistics is used to analyze data by making a general conclusion. Thus, the inferential statistical work for colligate sample findings to the population. If it is compatible with the functions, then the inferential statistics is suitable for the study sample (Sudjana, 2005; Anas, S. 2008; Dajan, A., 2009: Garrett, H.E., 2007).

One of the elements that form the basis in scientific research is the measurement. Everything we do starts with the

measurement of objects that will we learn. Measurement is by giving number or code for an object. Simply, measurement is defined as a procedure to classify the case (the subject of research, experimental units, the respondent, or in general objects such as people, companies, objects, and so on) into the categories within a particular variable. The expression indicates that variable is closely associated with the notion of measurement. Variable is any characteristic that can be classified into at least two classifications (Gay, LR, Milss, GE, & Airasian, P., 2006; Badru, BB, 2010; Somekh, B., & Lewin, C., 2007; Creswell, JW, 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Moses, MS, 2007; and Nazir, Moh, 2003).

In quantitative studies, for example when a student wants to use parametric statistical regression analysis to analyze and assess research problems. Selection of model analysis is commonly used only when the scale of measurement that is done is an interval or ratio. Meanwhile the data collection techniques are performed by students is an ordinal scale. In facing such situation, one way to do is by raising the level of ordinal measurement scale into intervals. Perform data manipulation by increasing the ordinal scale into interval, besides not to breaking the norm, is also to change the terms so that the normal distribution can be fulfilled when using parametric statistics. One transformation method which frequently used is Method of Successive Interval (MSI) (Arikunto, S., 2005; Anwar, S., 2004; Sudjiono, A., 2005; Umar, H., 2002; Simamora, 2004; Linn & Gronlund, 2000).

In the following description will explain about the measurement scale and the ordinal scale transformation to the distance scale by using Method of Successive Interval (MSI).

Measurement Scale

The measurement scale is an agreement that is used as a reference for determining the length of the short interval in measuring instruments, so that the measuring instrument when used in the measurement will produce quantitative data. With the scale of these measurements, the values of variables measured with a specific instrument can be expressed in terms of numbers, so it would be more accurate, efficient and communicative. There are four types of measurement scales, which are; Nominal, Ordinal, Interval and Ratio (Gay, L.R., Milss, G.E., & Airasian, P., 2006; Badru, B.B, 2010; Somekh, B., & Lewin, C., 2007; Creswell, J.W., 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Musa, M.S., 2007; dan Nazir, Moh., 2003).

1. *Nominal Scale*

Nominal scale is a measurement scale that states category, or group of a subject. Which means, the variables measured in terms of whether the characteristics of an object can be distinguished from other Characteristic, but we cannot measure or even sort the rankings of these categories (Badru, B.B, 2010; Somekh, B., & Lewin, C., 2007; Creswell, J.W., 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Musa, M.S., 2007; dan Nazir, Moh., 2003).

Therefore it is not appropriate to calculate the average value and standard deviation of the variable gender. Figures 1 and 2 are only as a way to classify subjects into different groups or just to calculate some number in each category. So, the test statistic that respons to the nominal scale is a statistical test that is based on counting such as mode and a frequency distribution

(Gay, L.R., Milss, G.E., & Airasian, P., 2006; Badru, B.B, 2010; Somekh, B., & Lewin, C., 2007; Creswell, J.W., 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Musa, M.S., 2007; dan Nazir, Moh., 2003).

2. Ordinal Scale

Ordinal scale not only categorized variable into groups, but also ranks the category. In other words, the ordinal scale allows us to sort the ranks of the object that we measured. In this case we can say that A is "much better" than B, or B is "less good" than A, but we can't say how much A is more than B. By that, the limit of one variation of the value to another is not clear. It only can be compared only if the value is higher, equal, or lower than the others, but we can't say certain difference the distance (interval) between these values (Gay, L.R., Milss, G.E., & Airasian, P., 2006; Badru, B.B, 2010; Somekh, B., & Lewin, C., 2007; Creswell, J.W., 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Musa, M.S., 2007; dan Nazir, Moh., 2003).

Ordinal scale is one type of scale that is widely used in social research. However, frequently testing statistical errors appear that associated with these scales (Ruslan, 2008; Paelori, T., 2006; Abadi, A.A., 2006; Hisyam, 2010; Bandi, 2010; Badru, B.B., (2010); and Irvan, M., 2010).

For example in the measurement of performance perceptions levels, each question item are numbered 1 for strongly disagree statements, 2 for disagree statements, number 3 for the in doubt statement, number 4 for agreed statement, and points score for the statement that could not agree more. Respondents who chose the number 4, it doesn't mean his perception of the performance on the item in question is 2 times than people who choose number 2. On the other hand, it also doesn't mean that a respondent who chose number 4 has the same perceptions with the respondents who chose the number 1, plus the perception of respondents who chose number 3. This is because the mathematical operations are only valid on ordinal scale and limited to the operation "=", "≠", "<" and "> '.

In order to make sure the ordinal scale can be used in data analysis using statistical parametric, first of all the data transformation will be done by using the Method of Successive Intervals (MSI). The probability transformation of "Z" is done to intervalized options on each item, or by using Weight Factor Score (Ruslan, 2008 ; Paelori, T., 2006; Hisham, 2010; Badru, BB, (2010); and Irvan, M., 2010). Because of changing the ordinal scale into an interval with MSI and Z transformation method takes long time and the level of errors in performing the calculations is high enough, then the score factors may be the best alternative.

3. Interval Scale

Interval scale not only allows us to classify, sort ranks, but also to measure and compare the size difference between the value (Gay, L.R., Milss, G.E., & Airasian, P., 2006; Badru, B.B, 2010; Somekh, B., & Lewin, C., 2007; Creswell, J.W., 2008; Indriantoro & Supomo, 2001; Sugiyono, 2004; Musa, M.S., 2007; and Nazir, Moh., 2003).

Besides the calculation of the median, mode, and the percentage, the calculation of average, standard deviation, and range can already be used on an interval scale. It is because the mathematical operations that can be used on a scale interval is the sign "=", "≠", "<", ">", "+", "-" "x", and "÷". For example the temperature: 10 ° C + 40 ° C = 50 ° C. Thus, on interval scale can

already be used with a statistical parametric testing, but before that the normality of the data has to be test first.

4. Rasio Scale

Ratio scale is very similar to the interval scale; besides it already have all the properties of the interval, is also identifiable absolute zero point, thus allowing states the ratio between these two values, such as x is two times as y. Some examples are weight, height, length, and age. For example, A = 70 kg weight, the weight W = 35 kg, Weight C = 0 kg. Here we can compare the ratios, for example, we can say that the weight of A is two-times the weight of B. Weight C = 0 kg, means that C doesn't have weights. Number 0 here is clear and indicates absolute value of 0. It is quite difficult to distinguish between interval and the ratio scale. The key is number 0, but the question is; does the value of zero is absolute (has meaning) or not? For example, the temperature can be in interval scale and also in ratio scale, depends on the scale of measurement that used. If we use the Celsius or Fahrenheit scale, it will included in interval scale, meanwhile if Kelvin is used, it will included in ratio scale. Why? It is because the temperature of 0 degrees Kelvin is absolute! We're not only can say that the temperature of 200 degrees is higher than the temperature of 100 degrees, but we also can certainty stated that the ratio is two times higher.

Besides calculation median, mode, and percentage, the calculation of average, standard deviation, and range can also be used in ratio scale. The sign that can be used in mathematical operations of interval scale are "=", "≠", "<", ">", "+", "-" "x", and "÷". Thus, statistical parametric testing can already been used on ratio scale, but before that the normality of the data have to be tested first.

Method

Ordinal scale to distance scale transformation is done by using Method of Successive Interval (MSI). This method done by calculating the proportion of each option on the scale that is used, then find the appropriate value in proportion to the normal dispersion. By using the MSI, besides doing transformation from ordinal scale to the distance scale, it is also by transformation the data to have normal dispersion. Therefore, parametric statistical test can be used (Waryanto, B., and Milafati, YES, 2006).

Transformation of ordinal scale to distance scale with the MSI performed on each option of each question items (Waryanto, B., and Milafati, YES, 2006). Stages in doing transformation with MSI are:

1. Determine the frequency on each option of each question items
2. Determine the proportion of each option by dividing the frequency of choice by the number of samples
3. Calculate the cumulative proportion that is by summing the proportion sequentially for each option
4. Determining the value of Z for each cumulative proportion that is considered follow the standard normal distribution
5. Determining the Density values for each value of Z
6. Counting Scale Value (SV) for each option
7. Changing the smallest Scale Value (SV) to be equal with one (1) and transforming each scale according to the smallest scale changes in order to

obtain Transformed Scale Value (TSV).

Example:

Suppose a student has the choice of instrument with each item question, namely: strongly agree, agree, neutral, disagree, and strongly disagree. Each option is given as an attribute score, that is; strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly disagree = 1. Number of sample study is 100 people.

For question 1, the data that obtained are; 23 people chose strongly agree, 55 people chose agree, 12 people chose neutral, 6 people chose not to agree, and 4 people chose strongly disagree.

Work Steps:

1. Determine the frequency of each option
   Based from the data obtained, the frequencies of each option are:
- Strongly disagree = 4
- Disagree = 6
- Neutral = 12
- Agree = 55
- Strongly agree = 23
2. Determine the proportion of each option by dividing the frequency of choice with number of samples
- Proportion of strongly disagree option (P1) = 4/100 = 0.04
- Proportion of disagree option (P2) = 6/100 = 0.06
- Proportion of neutral option (P3) = 12/100 = 0.12
- Proportion of agree option (P4) = 55/100 = 0.55
- Proportion of strongly agree option (P5) = 23/100 = 0.23
3. Calculate the cumulative proportion of that is by summing the proportion sequentially for each option
- PK1 = 0.04
- PK2 = 0.04 + 0.06 = 0.10
- PK3 = 0.10 + 0.12 = 0.22
- PK4 = 0.22 + 0.55 = 0.77
- PK5 = 0.77 + 0.23 = 1.00
4. Determining the value of Z for each cumulative proportion that considered spread follow the standard normal distribution. Z values can be seen on the Table of a normal Z distribution. If the desired value of Z is not found in the Table, then the linear interpolation or by taking the closest value can be done. Z value for each cumulative proportion is the distance from the midpoint of the normal curve Z to respective cumulative proportions, as shown in the following figure:

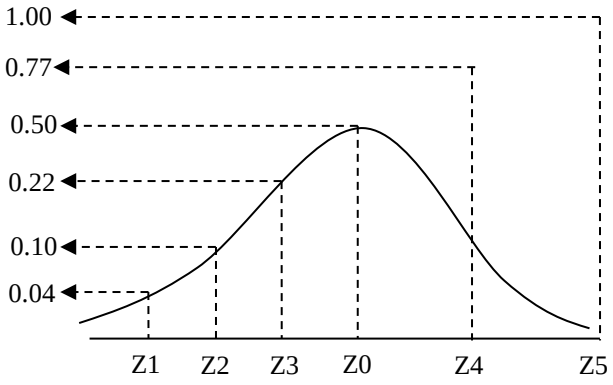

Figure 2: Z Values in Normal Curve

5. For PK1 = 0.04, the area of the Z0 to Z1 = PK1 - 0.5 = -0.46 (negative sign indicates that the Z1 located on the left Z0).
   In the table Z distribution, the size area 0:46 is not in the Table, therefore the closest size area that chosen is 0.46080. Z value that corresponds to the size area 0.46080 is 1.76. Therefore the value Z1 = -1.76
6. Next, the value of Z2, Z3, Z4, and Z5 for each PK2, PK3, PK4, and PK5 are obtained in the same way. The result is:
   Z2 = –1.29
   Z3 = –0.78
   Z4 = 0.74
   Z5 = ~ (unlimited)
7. Determining the Density values for each value of Z. Density values can be seen in the normal curve size Table (see Table 1). Density values are in the "ordinate (y)" column.
   Z1 = –1.76 ➔ DZ1 = 0.08478
   Z2 = –0.29 ➔ DZ2 = 0.17360
   Z3 = –0.78 ➔ DZ3 = 0.29431
   Z4 = 0.74 ➔ DZ4 = 0.30339
   Z5 = ~ ➔ DZ5 = 0
8. Calculating Scale Value (SV) for each option:

$$SV = \frac{Density\ lower\ limit\ value - density\ upper\ limit\ value}{suitable\ cumulative\ proportion - underneath\ cumulative\ proportion}$$

$$SV1 = \frac{0-0.08478}{0.04-0} = -2.1195$$

$$SV2 = \frac{0.08478-0.17360}{0.10-0.04} = -1.4803$$

$$SV3 = \frac{0.17360-0.29431}{0.22-0.10} = -1.0059$$

$$SV4 = \frac{0.29431-0.30339}{0.77-0.22} = -0.0165$$

$$SV5 = \frac{0.30339-0}{1.00-0.77} = 1.3191$$

9. Changing the Scale Value (SV) to be equal to one (1) and transforming each scale according to the smallest scale changes in order to obtain Transformed Scale Value (TSV).
   The smallest SV is SV1 = -2.1195. To transform SV1 to be equal to one (1), then 3.1195 needs to be added. The other each SV value are also added 3.1195.
   TSV1 = –2.1195 + 3.1195 = 1.0000
   TSV2 = –1.4803 + 3.1195 = 1.6392
   TSV3 = –1.0059 + 3.1195 = 2.1136
   TSV4 = –0.0165 + 3.1195 = 3.1030
   TSV5 = 1.3191 + 3.1195 = 4.4386
   TSV values above sequentially are the result of transformation from the ordinal scale to the distance (interval) scale. The results are shown in the following table.

Table 1: Transformation Results from the Ordinal to Interval Scale for Question Item 1

Options	Before Transformation (ordinal scale)	After Transformation (interval scale)
Strongly disagree	1	1.0000
Disagree	2	1.6392
Neutral	3	2.1136
Agree	4	3.1030
Strongly agree	5	4.4386

Transformation Scale process in question item 1 above, also performed on other question items. Thus the data that obtained after performing the transformation is the interval data, so it is allowed to use the parametric statistics.

Finding: Statistics Differences Test Results Before and After Transformation

Suppose a student conduct a study using sample of 100 people. Data independent variable (X) is obtained from about 8 question items, and data-dependent variable (Y) obtained from 9 question items. X and Y data before transformation were each given symbol Xearly and Yearly, and symbol Xtrans and Ytrans given after transformation. Kind of test that will be used is the Linear Regression.

Results after processed with SPSS 17 are shown by the following Table:

Linear Regression Test for the data before transformed.

Table 2: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.545	1.522		4.958	.000
	Xearly	.784	.047	.861	16.761	.000
a. Dependent Variable: Yearly						

Table 3: Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.861a	.741	.739	3.39915
a. Predictors: (Constant), Xearly				

Linear Regression Test for the data after transformed

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.943	1.485		4.676	.000
	Xtrans	.882	.059	.834	14.980	.000
a. Dependent Variable: Ytrans						

Table 5: Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834a	.696	.693	3.58735

a. Predictors: (Constant), Xtrans

From the Table 2, 3, 4 and 5 above, some of the following can be stated:

1. Either the data before or after the transformation indicates a significant effect (see Table 2 and 4 column sig.)
2. There is regression coefficient's difference (see Table 2 and 4)

- Constant regression (B0) on table 2 is 7.545 while in table 4 is 6.943. These results provide different interpretations, that is: table 2 shows that the score of the dependent variable (Yearly) is 7.545 by ignoring the independent variable (Xearly). While in table 4, the dependent variable's score (Ytrans) is 6.943 by ignoring the independent variable (Xtrans). There is a difference score that is 0.602. This indicates that there are different interpretations in the two groups of data (before and after transformation).
- Regression coefficient (B1) on table 2 is 0.784, while in table 2 it is 0.882. These results provide differing interpretations as well, that is; Table 2 shows that each increase of 1 unit on Xearly variables will lead to an increase in 0.784 units on the Yearly variable. While in Table 4, each 1 unit increase on Xtrans variable will be followed by an increasing of 0.882 units in Ytrans variables. This shows that there is distinction interpretation on both data groups of (before and after transformation), with difference of 0.098.

3. There is difference in correlation coefficient value and coefficient of determination (degrees determinants) as in schedule 3 and 5.

- Correlation coefficient value in table 3 is 0.861, while in table 5 the value is 0.834.
- In table 3, the determination coefficient value (r2) of Xearly variable to yearly be 0.741, which shows the variability that occurs on Yearly can be explained by Xearly variable about 74.1 percent. Meanwhile in Table 5, the determination coefficient value (r2) of Xtrans to Yrans about 0.696, which showed the variety that happened at the Ytrans changer can be explained by Xtrans variable about 69.6 percent. It shows that there is distinction interpretation of degrees determinant in both data groups (before and after transformation) with difference of 4.5 percent.

From the description above it can be said that the use of statistical tests on the data before and after transformation will lead to a distinction interpretation. Oversight in selecting statistical test will lead to wrong interpretation anyway. Therefore, it is required a careful selection of test statistics in study.

Data obtained from measurements using an ordinal scale should be tested with a non-parametric statistics. However, if you want to use parametric statistics, the transformation of the ordinal scale to scale the distance (interval) should be done first.

Conclusions

1. The measurement scale is an agreement that used as a reference to

determine the length of the interval in measuring instruments, so it will produce quantitative data when it used in the measurement.

2. There is four types of measuring scale that are Nominal, Ordinal, Interval and Ratio.
3. Ordinal to distance scale transformation is done by using Method of Successive Interval (MSI). This method count every proportion of option in each scale that used, then find appropriate value with the proportion at normal distribution. By using MSI, besides doing transformation from ordinal scale to distance scale, it is also transforming the data until it have normal distribution. By that, the parametric statistic test can be used.
4. Transformating ordinal scale to distance scale by using MSI is done to each option of question items.
5. Using statistic tests on each data group before and after the transformation lead the distinction interpretation. Oversight in choosing statistic test will also lead to wrong interpretation. Therefore, accuracy in choosing a statistic test for a study is needed.
6. Data obtained from measurements using an ordinal scale should be tested with a non-parametric statistics. However, if you want to use parametric statistics, the transformation of the ordinal scale to scale the distance (interval) should be done first.

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The Effect of Organizational Culture, Teamwork and Organizational Development on Organizational Commitment: The Mediating Role of Human Capital

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ABSTRACT

The aim of this work is providing a model for determining impact of organizational culture, teamwork and organizational development on organizational commitment with emphasis on the mediating role of human capital. The 266 employee of Muhammadiyah Prof Dr. Hamka (UHAMKA) University were selected using random sampling and they responded research tools. Path analysis test was used for analysis of research data. Findings show that organizational culture, teamwork, and organizational development have direct and significant impact on human capital. In addition, human capital has a positive effect on organizational commitment. Organizational culture, teamwork and organizational development have direct and significant effect on organizational commitment. Finally findings show that human capital has mediating role between organizational culture, teamwork, organizational development and organizational commitment.
Keywords: Human Capital, Organizational Commitment, Organizational Culture, Organizational Development and Teamwork.

Introduction

One of the superiority features of an organization over other organizations is having loyal and committed human forces. Commitment causes increased profitability and reduced service abandonment and leads to increased efficiency and improvement and increased service quality by influencing personnel performance: [1] Research works show that commitment influences staff performance, organizational outputs including service abandonment, promotion, and employee absenteeism; [2] Organizational commitment refers to the employees emotional attachment which is comparable with other work related states and attitudes such as job satisfaction (feeling of employees toward the work) and organizational identity (Sense of unity and solidarity that employees have toward the organization). Organizational commitment is considered as mental and emotional dependence to the organization, based on which a highly committed person specifies his identity by the organization, participates in the organization and is involved in it and enjoys membership in organization; [3] in their work on commitment provided a new classification which is more comprehensive compared to old organizational commitment dimensions.

Emotional commitment

Emotional commitment means employee's emotional attachment to the organization. This type of attachment is person specifies his identity by the organization, participates in the organization and is involved in it and enjoys membership in organization.

Continuous commitment

Continuous commitment refers to individual's commitment based on his perception of the costs related to

organization abandonment. According to this definition, people remain in the organization not because they feel moral force, or because they have emotional attachment, but because if they leave the organization, they may lose some occupational advantages such as status and occupational position.

Normative commitment

Normative commitment means staying in the organization because of moral force. In other words, people stay in the organization because they have a sense of duty that they should not leave the organization. People experiences before (such as the cultural and familial socialization) and after (organizational socialization) entering the organization are its effective factors. Without organizational, even the most complex and innovative plans of the senior executives would not be useful. Evidence shows that if the organization provides improvement, suitable career path, fair pay, fairness in the distribution of rewards, autonomy at work, professional identity and suitable image for the job and the organization in the society, employees will show high commitment.

On the other hand, lack of research works investigating effect of organizational culture, teamwork, and organization development on organizational commitment is felt. In addition, mediating role of human capital between organizational culture, teamwork and organizational development and commitment has also been understudied [6]. Thus the aim of this work is investigating the impact of organizational culture, teamwork, and organizational development variables on employee commitment.

Discussion

Organizational commitment and organizational culture

Koontz (2011) defined organizational culture as general pattern behaviour, beliefs, collected and shared perception of values which are considered common in most of organization members. Robbins (2010), in his book entitled "Management" defined organizational culture as follows: organizational culture specifies the way of running affairs in the organization for the employees, it is a shared perception of the organization which is observed in all organizational members and reflects common and permanent characteristics that distinguish the organization from other organizations. In other words, organizational culture specifies social identity in each organization. Reviewing definitions for organizational culture over two past decades by management experts and authors, gives the following common points: (1) Dominant behaviour pattern; (2) Systemic or systematic nature; (3) A set of values and beliefs and views; (4) Joint and advocacy of these norms and values by organization members; (5) Organizational culture distinguishes organizations.

Findings show that organizational culture provides job security for all employees and gives life-long or long term employment, and job security leads to promotion of organizational commitment in employees. Studies show that the culture has positive effect on development of goals, strategy, individual behaviour, organizational performance, motivation and job satisfaction, innovation, decision making and organizational commitment of the employees.

Teamwork and organizational commitment

Team is in fact a working group which has all conditions for a real team and its members are totally committed to each other's promotion and success. This commitment often leads to team development. A team with high executive power specifically performs all actions better than other teams and meets all logical expectations of the members. Teamwork is a mental and emotional preoccupation in individuals in group situations which motivate them to help each other for achieving group goals and to participate in the work responsibility. Teamwork is a tool for increasing working creativity, which implicitly leads to consolidation of job satisfaction. Focus and attention to effectiveness and efficiency of working teams requires teamwork spirit, so that members or elements of working teams are able to do team work and team activity. The way of interaction and activity of members is important and crucial in success or failure of the teams, thus teamwork culture should be institutionalized in the organization prior to formation and establishment of working teams. Considerable impact of team work culture and group work is such that management scientists regard it as a prerequisite for achieving stable key capabilities in competitive environment of today's world. Working team institutionalization is achievable through promotion of team work culture.

This would be realized by training and enhancing principles of team work. Thus having these principles and criteria and explaining and implementing them for institutionalization in the minds of employees, workers and executives of the organizations is the main way for achieving efficient and effective working team. Findings indicate that in organizations where team work conditions are provided, their employees have more commitment to their organizations. In addition, findings in this work show that there is positive correlation between teamwork and organizational commitment of the employees.

Organizational development, human capital and organizational commitment

Organizational development refers to systemic application of behavioral science knowledge for planned development and promotion and emphasis on strategies, structures, and organizational processes in order to improve organization effectiveness. Organizational development strategy is related to planning and implementing plans which is designed for "increased effectiveness of organizational performance". This strategy includes strategies for designing organizational processes and organizational development plans for changing organizational shape and management of transition from current status to optimal one. Organizational development is recognized as a specific and comprehensive method for planned organizational change. Organizational development means application knowledge related to behavioral sciences in a wide-range and systematic attempt for improving organizational effectiveness. Common pattern of organizational development is divided into three levels: individual, group and organizational. First, they are patterns designed for improving individual effectiveness. Second, they are patterns designed for improving group effectiveness.

Human capital includes knowledge, creativity, experiences, and professional and occupational skills of the employees and individuals of the organization and it

refers to the value added created by the employees in the process of turning knowledge and experience to service and goods for the organization. Human capital is regarded as the basis of intellectual capital and basic element in implementing its tasks. This type of capital is the ability and capacity of human forces for solving organizational problems. Human capital is essential part of the employees and it cannot be owned by the organization, thus it is lost when the employees leave the organization. Human capital results from collection of professional knowledge of employees, leadership ability, risk-taking and problem-solving abilities. Human capital also reflects implicit knowledge of the individuals which is embedded in their mind. Human capital is an important resource of innovation and reconstruction of the strategy in each organization, and the organization can produce and identify the value based on the knowledge in the economy using this capital. Puhakainen and Siponen (2010: 757-778), maintain that employees create human capital through their competence, attitude and intellectual agility.

Competence includes individual's skills and education, while attitude includes behavioral element. Intellectual agility enables one to change the thought about innovative solutions for problems. Jones et al (2004:139-175), believe that human capital as intellectual capital refers to such factors as knowledge, skill, capability and perception of the employees resulting in performance improvement so that customers tend to pay for it. In addition, it causes profitability for the organization. Knowledge and skill are embedded in the mind of employees; it means that their mind is the result of knowledge and skill. If intellectual employees are not utilized by the organization, the knowledge and skill in their mind may not be activated or may not be turned into market value. Findings show that promotion and improvement of skills, values, organizational structures and processes improve organizational commitment in employees. On the other hand, findings suggest that human capital in organizations and institutions has positive relationship with the commitment to organization.

Conceptual model

After reviewing theoretical and research works, a conceptual model was developed (Fig. 1). The literature indicated that committed human forces are one of the superiority features of an organization over other organizations. In this study, we expand this literature by recognizing some of the mechanisms that increase organizational commitment. Specifically, organizational culture is one of important variables that effect organizational commitment. In organizations in which team work conditions are provided, their employees have more commitment. In addition, organizational development is identified as a pervasive method for planned organizational variation.

Therefore, we investigate the relationship between organizational development and organizational commitment. As is well shown in the literature of organizational commitment, human capital includes knowledge, creativity, experiences, and professional and occupational skills of the employees and individuals of the organization possessed are positively related to the organizational commitment. Thus, we examine the relationship between human capital and organizational commitment to recognize the conditions vital for managers to increase employee commitment in the

organizations. Human capital results from structure organization and collection of professional knowledge of employees, leadership ability and problem-solving abilities. Thus, in this study human capital mediated the relationship between organizational culture, team work and organizational development with organizational commitment.

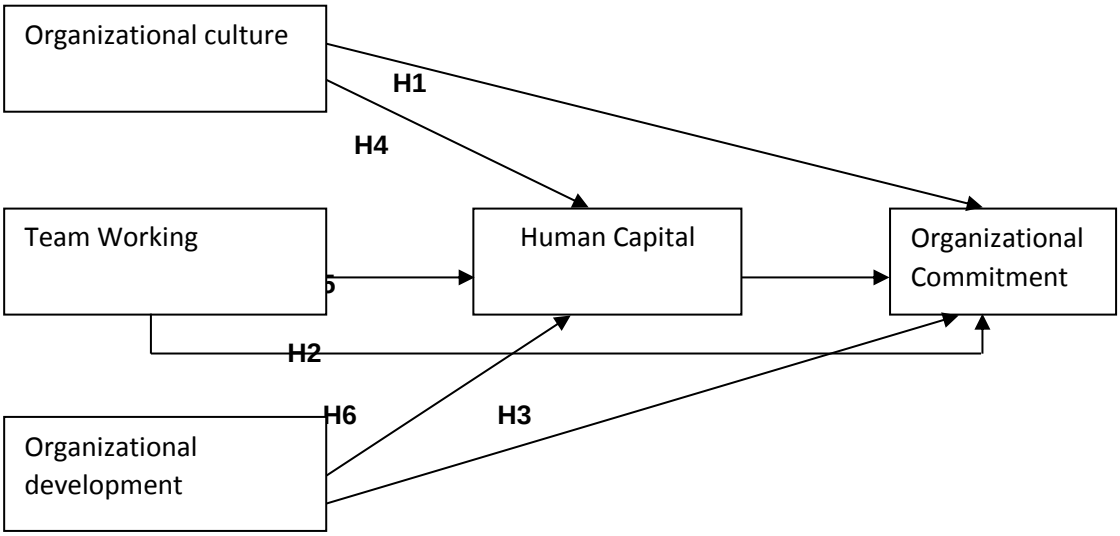

Figure 1 Conceptual Model

Research Hypotheses

H1: According to results, we hypothesize organizational culture positively influences organizational commitment.

H2: According to results, we hypothesize team working positively influences organizational commitment.

H3: According to perspective, we hypothesize organizational development positively influences organizational commitment.

H4: According to results, we hypothesize human capital mediated relationship between organizational culture, team work and organizational development with organizational commitment.

H7: According to results, we hypothesize human capital positively influences organizational commitment.

Research Methodology

This study used a quantitative approach with survey method. Related to the survey, according to Lodico, Spaulding and Voegtle (2010: 201-204), explains that' "Descriptive survey research, the approaches share the following common characteristics: (a) Identify a Research Topic; (b) Conduct a Review of the Literature; (c) Develop Research Questions; (d) Develop the Survey".

Population and sample

The population consisted of all employees of Muhammadiyah Prof. Dr. Hamka (UHAMKA) University. 266 employees of Muhammadiyah Prof. Dr. Hamka (UHAMKA) University were selected using random sampling and they responded research tools. Findings show that 64, 3 % of the respondents were

workers, 28, 2 % were teachers, 3, 4 % were middle managers, and 1, 1 % was top level managers.

Table 1 Frequency distribution of respondents in terms of organizational class variable

Respondents	Frequency	Percent / %
Workers	171	64,3
Teachers	75	28,2
Middle managers	9	3,4
Top level managers	3	1,1
others	8	3

For clearer understanding of the relationship between the variables, and examining the mediating role of human resources in the relation with organizational culture, teamwork, and organizational development variables, a path analysis was run with organizational commitment. This model examined the direct and indirect relationships between the independent variables and organizational commitment. Path diagram and standardized coefficients, together with primary goodness of fit indices are shown in Fig. 1. This figure shows tested model with standardized values on the paths. Findings indicate that respective path coefficients are significant and have positive impact on each other. Related hypotheses are examined in the following.

As can be seen in Fig.1, the direct paths of organizational culture, teamwork, and organizational development to organizational commitment are statistically significant. In other words, in this model, these variables have direct influence on organizational commitment, and this influence takes place indirectly through human resources. Therefore, it may be concluded that independent variables increase the organizational commitment by affecting and increasing the level of human resources.

The first hypothesis indicated that organizational culture positively influences organizational commitment.

Research tools

Questionnaire was used for data collection. Generally according to research conceptual model, questionnaires of organizational culture, teamwork, organizational development, human capital and organizational commitment were used. Confirmatory factor analysis was used to determine the validity of these tools and for determining the reliability; Cronbach's alpha test was used. The findings show that the validity and reliability of these tools are approved and have adequate reliability and validity.

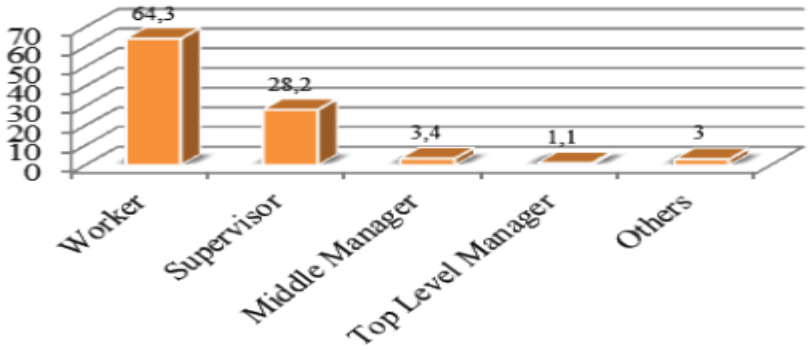

Figure 2. The validity and reliability

Analysis method

Structural equation modelling (SEM) is used for investigating direct and indirect relationship between organizational culture, team work organizational development and human capital with organizational commitment. SEM is a causal modelling approach that combines cause–effect information with statistical data to provide a quantitative assessment of relationships among the studied variables. The abilities of SEM to study direct and indirect relationships between variables and to analyze relationships between latent variables without random error differentiate SEM from other simpler, relational modelling processes.

Confirmatory factor analysis (CFA) was performed to confirm validity of constructs included organizational commitment, organizational culture, team work, organizational development and human capital using the LISREL 8.5 statistical program. Confirmatory factor analysis includes the examination of a measurement model where many of the factors and the corresponding indicators are itemized a priori to uphold the structure of the measure. Standardized coefficients in measurement models defined as factor loadings (λs) were examined to identify the ratio of variance in each indicator (item) that explained the construct. The validity of each indicator was estimated acceptable when λs ≥ 0, 50. The goodness of fit indices was used to confirm the fitness of the measurement and path analysis models. We used most common indices to evaluate the confirmatory factor analysis models and path analysis model includes: χ2/df, the Bentler comparative fit index (CFI), the root mean square error of approximation (RMSEA), the root mean square residual (RMR), the goodness of fit index (GFI), the adjusted goodness of fit index (AGFI) and the non-normative fit index (NNFI). According to Kline, χ2/df statistic, with scores <5, RMSEA ≤0, 08, the CFI, GFI, AGFI, CFI and NNFI with scores ≥0, 90, and RMR with scores <0, 1 indicates good fit of the model to the data.

Results

Descriptive statistics including mean and standard deviation of variables and their correlation coefficients is presented in Tab. 2. As can be seen in Table 2, correlation coefficients between organizational culture(r=0, 83), team work (r=0, 75), organizational development(r=0, 73) and human capital (r=0, 77) with organizational commitment is significant (P<0, 01) and positive. Moreover, results showed that organizational culture, team

work and organizational development positively correlated with human capital. There are relatively high and positive correlations between the organizational variables. The highest correlations were between organizational culture and human capital (r=0, 83; P<0, 01) and organizational development and human capital (r=0, 81; P<0, 01), and the lowest was between teamwork and organizational culture (r=0,068; P<0, 01). Correlation coefficients between other variables were higher than 0, 7.

Table 2. Descriptive statistics and inter correlations of the research Variables

No	Parameter	M	SD	1	2	3	4
1	Organizational commitment	20,5	5,9	1			
2	Human Capital	32,2	108	0,77**	1		
3	Organizational Culture	17,9	6,6	0,76	0,83	1	
4	Teamwork	12,6	4,1	0,75**	0,75**	0,68**	1
5	Organizational development	24,9	7,9	0,73**	0,82**	0,73**	0,77**

** P<0, 01

For clearer understanding of the relationship between the variables, and examining the mediating role of human resources in the relation with organizational culture, teamwork, and organizational development variables, a path analysis was run with organizational commitment. This model examined the direct and indirect relationships between the independent variables and organizational commitment. Path diagram and standardized coefficients, together with primary goodness of fit indices are shown in Fig. 3. This figure shows tested model with standardized values on the paths. Findings indicate that respective path coefficients are significant and have positive impact on each other.

Related hypotheses are examined in the following.

As can be seen in Fig. 3, the direct paths of organizational culture, teamwork, and organizational development to organizational commitment are statistically significant. In other words, in this model, these variables have direct influence on organizational commitment, and this influence takes place indirectly through human resources. Therefore, it may be concluded that independent variables increase the organizational commitment by affecting and increasing the level of human resources.

The first hypothesis indicated that organizational culture positively influences organizational commitment. Findings in Tab. 3 showed that coefficient of organizational culture on organizational commitment is β = 0, 51 which is significant and positive at p < 0, 01. Thus hypothesis 1 is supported. Second hypothesis revealed that Team working positively influences organizational commitment. Findings show that Team working with 0, 51 influence coefficient

has positive significant impact on organizational commitment. Therefore, hypothesis 2 is also supported. Third hypothesis suggested that Organizational development positively influences organizational commitment. Findings in Tab.3 showed that coefficient of organizational development on organizational commitment is β = 0, 51 which is significant and positive at p < 0, 01. Thus hypothesis 3 is supported.

Fourth hypothesis revealed that organizational culture positively influences human capital. Findings show that organizational culture with 0, 51 influence coefficient has a positive significant impact on human capital. Hypothesis 5 suggested that team working positively influences human capital. Findings in Tab. 3 showed that coefficient of team working on human capital is β = 0, 53 which is significant and positive at p <0, 01. Thus hypothesis 5 is supported. Another finding showed that organizational development positively influences human capital and Human capital positively influences organizational commitment. Thus hypotheses 6 and 7 are supported. In addition, in order to better fit the model the reciprocal path between the organizational commitment and human resources was estimated that indicates the organizational commitment increases with increasing human resources. The goodness- of- fit indices show that the model fits the data well. The chi-square value of 1, 1 with degree of freedom of 1 is not statistically significant. The RMSEA value of 0, 02 is less than the acceptable criteria (<2, 0). Other fit indices such as Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and Normed Fit Index (NFI) were also significant and equaled 0,99.

The determinant coefficient was also found R2=0, 69, which indicates that almost 70 % of organizational commitment variance can be explained through this model. The value of this coefficient was also found for human capital at R2=0, 85. In other word 70 % of organizational commitment variance and 85 % of capital human variance was explained by model variables.

Table 3 Coefficients of direct, indirect and total effect

Paths	**Direct effect**	**Indirect effect**	**Total effect**
To organizational commitment from			
Human capital	0,91 **	-	0,91 **
Organizational culture	0,51 **	0,41 **	0,97 **
Team work	0,51 **	0,48 **	0,99 **
Organizational development	0,51 **	0,37 **	0,88 **
To human capital from			
Organizational culture	0,51 **	-	0,51 **
Team work	0,51 **	-	0,51 **
Organizational development	0,41 **	-	0,41 **

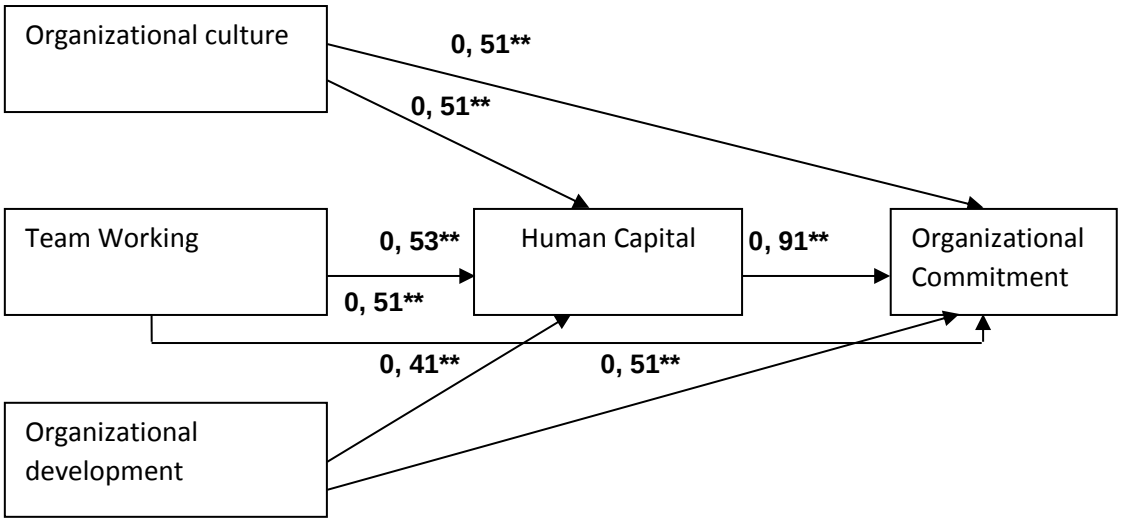

Figure 3 Tested model and path coefficients (** P<0, 01)

Conclusion

A major contribution of the study was the empirical examination of the conceptual model shown in Fig. 1. Following reviewed theoretical and research works, the following conceptual model was developed. In this model, organizational culture, teamwork and organizational development were regarded as independent variables and human capital has a mediating role. Organizational commitment was also regarded as a dependent variable. Findings show that organizational culture has a significant impact on human capital. In other words, cultural values and beliefs in organizations can improve organizational commitment. This finding indicated that organizational culture is an important factor in developing or changing values, attitudes, and creating appropriate behavioral patterns as well as organizational commitment of employees.

In addition, teamwork had direct and significant impact on human capital and organizational commitment. Its implication is that mobilization of actions, knowledge, skills and expertise of all employees in the form of team activities is very crucial in the organizations. Hence, team structures and organizing activities in the form of team cause commitment and support of the organization by employees. It was also found that organizational development has direct and significant effect on human capital and organizational commitment. Thus organizational development by helping members of organizations as well as improving working structures and process may lead to formation of human capital and improvement of organizational commitment.

Organizational development by continuous improvement of beliefs and attitudes can increase employees' motivation and tendency to the organizational commitment. In addition, human capital has also a positive effect on organizational commitment. Organizational culture, teamwork, and organizational development have a direct and significant impact on organizational commitment. Finally findings indicated that human capital has a mediating role between organizational culture, teamwork,

organizational development and organizational commitment. Therefore, in order to improve organizational commitment of the employees, the organizational culture should be improved by improving beliefs, norms and values of the organization and also improving teamwork and team conditions.

Implication

This study provided some guidelines to help managers to comprehend how to increase employee's organizational commitment. First, our research indicated the importance of organizational culture for increase and promoting organizational commitment. It suggests to organizations to promote general pattern of behaviour, beliefs, collected and shared perception of values which are considered common in most of organization members. Because organizational culture provides job security for all personnel and gives life-long or long term employment, and in turn leads to increase of organizational commitment in employees. Second, this study shows that team work is an important determinant of organizational commitment.

It appears managers' support for team work is necessary in organization. Thus, managers should provide team work conditions in order to foster organizational commitment. Third, results of this study indicate that organizational development has a direct effect on organizational commitment. Organizational development includes strategies for designing organizational processes and organizational development plans for changing optimal one. Therefore, organizational development is important in forming organization potential to generate organizational commitment. Fourth, results of this study show that organizational culture, team work and organizational development positively and indirectly influence organizational commitment through human capital. Therefore, human capital plays a bridge role to connect organizational culture, team work and organizational development and organizational commitment. This finding indicated that organizations should concentrate on developing organizational human capital as guidelines for maintaining their organizational commitment.

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Curriculum of 2013 as a Mode for Character Builder of Social Studies in the Elementary School (Case Study at SDN Kompleks Kapota Yudha Makassar)

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ABSTRACT

Currently, the Indonesian nation is facing challenges in many areas of life. Every level of education, especially at the elementary school level is the level of the beginning of the formation of knowledge, attitudes, and skills of learners. In the reality of today's life, there is the likelihood of moral decadence in the elementary school students, such as student fights, the culture of dishonesty such as the number of students who like cheating, lack of respect for parents, teachers, and other laudable actions. The character of education seeks to answer the challenges of the current moral problem. The character of education is important for elementary applied to build the character of students in order to apply the values, morals, and ethics, character and spiritual early. In this paper, the researcher focuses on the link between learning social studies curriculum of 2013, with the character of education in SDN Complex kapota Yudha Makassar. The researcher used observations and theoretical studies, the researcher still found the activities of teachers in the learning process is more focused on aspects of knowledge and skills so that sometimes affective aspects such spiritual attitudes and social attitudes still less attention. If directed learners in learning as early as possible in the formation of character, it is not impossible that the Indonesian people would be superior because it can produce quality human resources.

Keywords: Curriculum of 2013, Characters, Social Studies Learning for Elementary School

Introduction

Education is a very vital in every country. The education sector is one of the factors that determine the progress of a country. One way to accelerate the realization of the ideals of our country is to prepare the future generation a strong, intelligent, independent, and adhering to the values of spiritual. One of the goals of education is to drive our nation into a better direction through achieving improvement of the nation's life and the quality of human resources in a creative, have some knowledge, skills, personality independent and oriented toward the future. In line with that in the Law No. 20 the year 2003 on National Education System Section 3 (2009: 5), states that:

National education working to develop the ability and character development and civilization of the nation's dignity in the context of the intellectual life of the nation, is aimed at developing students' potentials in order to become a man of faith and fear of God almighty One, noble, healthy, knowledgeable, skilled, creative, independent and become citizens of a democratic and responsible.

In order to realize the above conditions, the government through the Ministry of Education and Culture continues to reform and innovation in the field of education. The government has changed the curriculum and enhance up to now of using SBC to switch to using the

curriculum of 2013. The character education curriculum is a major issue in 2013. Even among the main reasons for curriculum change in 2013 was the reason the character. Even long before rolling curriculum and implemented character education issues already crowded discussed. Then become a character education as a national education program. At the moment, the government through Kemendikbud institutional has mandated to the whole educational institutions to implement a character-based education. Nowadays growing demands for changes in the education curriculum that emphasizes the need to establish the character of students.

The birth of the curriculum of 2013 is expected to address the challenges of development. Based on the functions and national goals, it is clear that at every level of education, especially at the primary level should be organized systematically to achieve those goals. On the other hand, the reality of life today, there is a tendency of moral decadence, such as student fights, drugs, and other actions that are not good. If this left unchecked then our existence as a great nation will be threatened its existence. Educational experts worrying our people to fall into ruin marked by numerous amoral attitude and lack of respect towards fellow human beings. According to Haris (2013: 1), there at least ten behavioral tendencies of our society which, if not addressed, it will cause the destruction of the nation. First, the increasing violence among teenagers. Second, culturing dishonesty. Third, bigotry toward the group. Fourth, lack of respect for parents and teachers. Fifth moral deterioration. Sixth, the use of language to deteriorate, the seventh increase in self-destructive behavior such as drug use, alcohol, and promiscuity. Eighth, the low sense of responsibility as individuals and as citizens. Ninth, the declining work ethic. Tenth, the lack of concern for others.

Seeing the problems mentioned above, the cultivation of the characters in this curriculum of 2013 is very important to be applied at the elementary level, one way is to integrate the values of characters in the process of learning social studies in elementary school. With early cultivation characters are expected to prepare humans to Indonesia so as to have good moral values as individuals and citizens who believe, do well in life, productive, creative, innovative, and able to contribute to the society, nation, and state.

The curriculum of 2013 is the development and improvement of the existing curriculum. In the curriculum of 2013, the formation of character in Primary Education is very important to seek as much as possible. One way that is done is to integrate the values of characters in learning social studies in primary school. Learning is done with reference to the indicators of each basic competence especially in social studies integrated into a specific theme, hoping to improve student learning outcomes. The implementation of the curriculum in 2013 there are four aspects that can be seen that; spiritual attitudes (K1) which is to create students that faith and fear of God Almighty, social attitudes (K2) which creates learners noble, healthy, independent, democratic, and accountable, aspects of knowledge (K3) is to creating learners who have knowledge and skills aspects (K4), which is capable and creative.

Discussion

The Urgency of Character Building

Education is a very vital in every country. Indonesia had a revamp and improve the curriculum until now. Firstly using KTSP now has a curriculum of 2013. The issue of character lately become familiar, especially in education. Character education is a major issue in the curriculum of 2013. Even among the main reasons for curriculum change in 2013 was the reason character. Even long before rolling curriculum and implemented character education issues already crowded discussed. Then become a character education as a national education program. The current education system is more prone to cognitive aspects of learners so that less attention empathy, sympathy, emotional behavior, social attitudes and spiritual attitudes. Increased behavioral promiscuity, cheating tradition, lack of respect for parents and teachers, lack of individual responsibility, rampant drug and alcohol use, increasing violence in schools and other bad things. This if left unchecked then our existence as a great nation will be dropped and give a moral breakdown of today's young generation. Therefore, in the character education curriculum of 2013 is expected to respond to the challenges and social problems are rife lately.

The problem that most occur in primary school, especially in SDN. Yudha Kapota complex is the tendency of most parents fully devolved character formation of their children in school so that the objectives formulated many are not achieved or expected. This can be seen from many elementary school children who often trash just anywhere, do not respect the teachers and parents, like cheating, fights with classmates, etc. Therefore, the formation of character is needed in this regard. The ability of character is the ability to integrate all of the value systems that has been owned by someone who affects personality and behavior patterns. Ability effective character is the highest level because the inner attitude of the students have been really thoughtful and has a value system that controls the consistent character of behaving. The planting character in this 2013 curriculum is very important to be applied at the elementary level, one way is to integrate the values of characters in the process of learning social studies in elementary school.

Development of Curriculum of 2013

The government through Law No. 20 Year 2003 on National Education System Section 3, states that the national education serves to develop the ability and character development and civilization of the nation's dignity in the context of the intellectual life of the nation, is aimed at developing students' potentials in order to become a man of faith and fear of God almighty One, noble, healthy, knowledgeable, skilled, creative, independent, and become citizens of a democratic and responsible.

Based on the functions and national goals, it is clear that at every level of education, especially at the primary level should be organized systematically to achieve those goals. On the other hand, the reality of life today, there is a tendency of moral decadence, such as student fights, drugs, and other laudable actions. This if left unchecked then our existence as a great nation will be threatened its existence.

Teachers are the main actors in the implementation of the curriculum of 2013. The curriculum of 2013 incompetence attitude, both spiritual attitude (K1) and

social attitudes (K2) is not taught in the learning process (PBM), but to be implemented or embodied in real action by the learners. That is the attitude of spiritual and social competence despite having basic competencies (KD), but not spelled out in the material or concept to be conveyed or taught to learners through PBM consists of the introductory activities, core activities, and closing activity. Therefore, if the attitude is taught, the teacher is teaching the real knowledge of attitudes, such as understanding honesty and discipline. Spiritual attitudes and social attitudes should appear in concrete actions of learners in everyday life, the attainment of such attitudes must be assessed by teachers on an ongoing basis. Spiritual attitudes and social competence should be implemented in the PBM through refraction and shown exemplary learners in their daily life. Here's a description of the competence of spiritual attitudes and social attitudes in the curriculum of 2013 (Kunandar, 2013: 101-102) is as follows:

Table 1 Core Competence Spiritual Attitude (KI 1) and Social Attitudes (KI 2) class I, II, and III Elementary / Madrasah Ibtidayah

Core Competence Class I	**Core Competence Class II**	**Core Competence Class III**
Accept and carrying out the teaching their religion	Accept and carrying out the teaching their religion	Accept and carrying out the teaching their religion
Having honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, and teachers	Shows honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, and teachers	Shows honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, teachers, and neighbors

Table 2 Core Competence Spiritual Attitude (KI 1) and Social Attitudes (KI 2) class IV, V, and VI Elementary / Madrasah Ibtidayah

Core Competence Class IV	**Core Competence Class V**	**Core Competence Class VI**
Receive, carry out and appreciate the teachings of their religion	Receive, carry out and appreciate the teachings of their religion	Receive, carry out and appreciate the teachings of their religion
Having honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, teachers, and neighbors	Shows honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, teachers, and neighbors and love of the homeland	Shows honest behavior, discipline, responsibility, manners, caring, and confident in interacting with family, friends, teachers, and neighbors and love of the homeland

Implementation of Curriculum of 2013 in Character Building on the Learning Social Studies at Elementary School

Social studies learning actually have relevance to the development efforts of the nation's character. Social studies learning clearly has a value that is very close to the character formation of the students. According to the Ministry of National Education started in 2011, the entire education in Indonesia must insert the values of character education to the learners in the educational process. According to the Ministry of National

Education (2010) there are 18 character values are: Religious, honesty, tolerance, discipline, hard work, creative, independent, democratic, curiosity, the spirit of nationalism, patriotism, recognize excellence, communicative, peace-loving, fond reading, environmental care, social care and responsibility. Social studies learning through the integration of character values is expected to build knowledge of learners through means of scientific work, work in teams, and learn to interact and communicate, and behave in accordance with the values of life that thrive in the community.

Term value of the character, there are two words that values and character. To know the definition of character. In language, the character comes from the Latin "kharakter", "kharassein", "kharax", in English "character. According to Hornby & Parnwell, 2012: 49, the character is mental or moral quality, moral strength, the name or reputation. Hermawan Kertajaya (2010: 3) defines the character is "characteristic" which is owned by an individual. The distinctive feature is driving how one acts, act, say, and respond to something. In character education, kindness is often summarized in the good qualities. Thus, the ability of character is the ability to integrate all of the value system that has been owned by someone that affect patterns of personality and behavior. Ability affective character is the highest level because the inner attitude of the students have been really thoughtful and has a value system that controls consistent character in a well-behaved at school, at home and in the community.

Efforts to instill the values of character education it requires the roles and responsibilities of all parties, from governments, schools, teachers, and parents. In 2013 the role of teacher curriculum are preferred because the teachers are the main actors in implementing learning activities. Primary school level through social study subjects need to equip students with various abilities. According to Abduh (Yaba, 2010: 11) argues that "There are four abilities that should be owned by the students, namely, knowledge, skills, values, and attitudes, as well as participation in society". IPS learning in the curriculum of 2013 is expected to not only the establishment and development of conceptual knowledge but attitude and guidance on application skills as social beings. Therefore, in the presentation of the teaching of social studies teachers should be able to extract value / meaning contained in the concept, as well as how to apply it not only handed a series of concepts only.

Character values integration in teaching social studies at SDN Complex Kapota Yudha in fourth grade performed with several stages. First, the initial activities to cultivate pray before studying. This exemplary applied in order to provide insight to students the importance of religious values in prayer before starting lessons. Second, the core activity gives purpose / overview of the material or the skill and delivering learning activities that will be pursued in accordance with the learners' learning tools that have been created by teachers that are integrated with character values into Social studies learning. Third, motivating the students to study harder, paying attention and affection then closes the learning by reading a prayer.

To facilitate the cultivation character in students at SDN Comp. Kapota Yudha, especially in the fourth grade, a researcher

with the teacher the formulation of some indicators that are the focus of spiritual attitudes, assessment, includes: pray before learning, devout prayer, habits and behaviors respect religious teachings grateful. In addition, for the social aspects include responsibility, honesty, cooperation, courtesy, confidence, and discipline. With early planting characters are expected to prepare humans to Indonesia in order to have good moral values as individuals and citizens who believe, do good in life, productive, creative, innovative, and able to contribute to the life of society and the state.

Based on the observations of researchers, there are several important notes about the means used to enter values of characters in the social studies lesson in SDN Complex kapota Yudha in the fourth grade, as it expresses the values that exist in learning materials, integrating the values of characters into learning IPS , expressing values through discussion / problem solving, using stories to bring the values and use a variety of positive activities such as social events, help people or communities. Furthermore, the determination of votes character values learners in learning social studies based on predetermined indicators that curiosity, discipline, responsibility and so forth. In practice, there are some inhibiting factors in applying the values of the characters in the social studies learning in SDN Komp.Kapota Yudha such as lack of awareness of student's lack of parental supervision, and lack of teacher's creativity in developing spiritual values and social learning activities.

Therefore, to minimize the occurrence of inhibiting factors above, it would require the cooperation and commitment from all parties, both of the elements of schools, parents, the community, and the main thing is their awareness of self-learners that application of the values characters can run smoothly.

Closure

Curriculum of 2013 is the development and improvement of the existing curriculum. In the curriculum in 2013, the formation of character in SDN Comp. Kapota Yudha very important to sought as much as possible. Character values can be applied in learning through disclosure of the values that exist in learning materials, integrating the values of characters into social studies learning, expressing values through discussion / problem solving, using stories to bring the values and uses a variety of activities positive such as social service, helping people or communities. Furthermore, the determination of vote's character values learners in learning social studies based on predetermined indicators that curiosity, discipline, responsibility and so forth. Meanwhile, the lack of awareness of self-learners, lack of attention of parents who do not understand how to build the character of children at home, the lack of creativity of teachers in developing values in learning.

Therefore, with the participation of all parties, especially in the field of education is expected to support the planting of character values through learning social studies in the curriculum in 2013, and to address challenges and social problems are rife lately.

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The Role of Pancasila and Citizenship Education in Creating Morality and Ethic of Children Character (a Case Study at University of Muhammadiyah Makassar)

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ABSTRACT

Pancasila and civic education, moral, ethics are very important in the formation of character. This is because the size of the good people, both as individuals and as citizens, and the citizens especially those of children. In this paper, the researcher examined ethics and moral education of Pancasila and citizenship role in the formation of character. Researchers used qualitative descriptive, this study was based on theoretical studies looking at the role of Pancasila education in the formation of ethics and morals of children. The researcher concluded that Pancasila has very important role in the formation of character, especially in ethics and morals because it is a foundation in the formation of character.

Keywords: Education of Pancasila and citizenship, ethics and moral

Introduction

Law of the Republic of Indonesia Number 20 of 2003 on the national education system article 3 confirms that the function and purpose of national education is to develop skills and character development and civilization of the nation's dignity in the context of the intellectual life of the nation. It is aimed at developing students' potentials to become a man faith and fear of the One of God Almighty, noble morals, healthy, knowledgeable, skilled, creative, and independent, and become citizens of a democratic and accountable.

Pancasila is the education of values aimed at forming a positive attitude of the people according to the values contained in Pancasila. Therefore, the direction of Pancasila education emphasis on moral education which is expected to be realized in everyday life in the form of behavior that made the moral basis in any activities of individuals, groups, communities and even nation states.

In Pancasila contained noble values, those teaching morals are embodiment of all Indonesian souls that they realized the preservation of the values of Pancasila that we need to try a real and continuous appreciation and experience of noble values contained therein, and therefore, each citizen of Indonesia should be equally practice the values of Pancasila for the sake of continuity.

Pancasila education directs attention to the formation of personality, morality and ethics. Those are expected to be realized in everyday life behavior such as:

1. Radiating faith and piety towards the One God Almighty in a society consisting of various denominations.
2. Be just and civilized humanity.
3. Supporting national unity in a society of diverse interests.
4. Supports populist who put the common interest above the interests of individual and group, so that differences in thoughts, opinions and interests could be solved through consultation and consensus.
5. Supporting the efforts to achieve social justice for all the people of Indonesia.

Pancasila education in college is also known as effective education, which is the education for self-development, in order to become useful and healthy man mental. National Pancasila education brings with

intellectual education as an integrated manner. On the result of Pancasila education, it is expected to materialize in the form of attitudes and behaviour in everyday life. Thus, Pancasila and citizenship education are expected to:

1. Realizing the personality formation Indonesian citizens.
2. Instill morality (values are needed in the nation Indonesia).
3. Nations grow and develop ethics (ethics Pancasila) is a way of life and the life of the nation Indonesia.
4. As well as well as foster the ability to do daily lives as citizens in society and the nation and state by applying the values of Pancasila.

The competence of Pancasila education graduates is a set of intellectual act responsibly as a citizen in solving various problems in the life of society, nation and state by applying thinking based on the values of Pancasila.

Research Question

"How is the role of Pancasila and citizenship education in creating moral, ethics of children character formation?"

Understanding Pancasila Education in the College

Presentation of Pancasila education lectures at universities pulpit is by the laws and regulations and the legal basis of existing scientific and objective analysis in order to find the essence and truth of Pancasila basis of the unitary state of Indonesia, outlook of the Indonesia nation.

The purposes of the implementation of Pancasila and citizenship education in college are:

1. Provide insight, impregnation and a deeper appreciation of the basis Pancasila and the nation ideology of Indonesia.
2. In order to increase understanding and greater confidence and deep understanding of the truth, the Pancasila state ideology, national ideology and outlook of the nation Indonesia.
3. For strengthen the national security of the nation Indonesia.
4. To cultivate awareness of critical appreciation and observation of the value - the value the customs, culture, tradition, literature and trust their own nation in the midst of community life.

The purpose of education is as a set of intellectual act responsibly to possess someone as a requirement to be able to be considered capable of performing tasks in the field of certain professions

The Role of Pancasila and Citizenship for Students

Students are superior generations where they will be a leader. It means, they requires moral and academic education that will support students' personal figure. Personality students will grow with time and experience of the reform process, provisioning, determination, and ultimately termination of the principles themselves. State, community future, required sufficient knowledge to be able to support the establishment of a State pharmaceutics. Countries will step forward requires a large carrying capacity of society, requiring a higher quality workforce, with a high spirit of loyalty. States are encouraged to arouse the public in order to create a sense of unity and a sense of co-own. Society must be made to immediately devote himself to his country, united in the same sense to face the crisis of culture, belief, moral and others. State must

describe the image in society that arises a sense of pride and a desire to protect and defend our country. Civic education is an appropriate means to provide a snapshot directly about the things that concerned about the nationality of the student.

Pancasila and citizenship education are very important. In the Indonesian context, citizenship and pancasila education contain among others the pluralism namely respect for diversity, collaborative learning, and creativity. Education teaches the values of citizenship within the framework of national identity.

The essence of Pancasila and citizenship education is conscious and planned effort to educate the nation's life for citizens by growing the nation's identity and morality as the basis for the implementation of rights and obligations in defending the country, for the sake of the survival of life and glory of the nation and the state. So with the intellectual life of the nation, gave the science of state governance, foster confidence in the identity of the nation and the nation's morale, it would not be difficult to maintain the continuity of life and the triumph of Indonesia. The competencies expected of subjects Pancasila and citizenship education are able to become citizens who have a view and commitment to the values of Pancasila, including the establishment of ethics and morals, so that students are able to participate in the effort to prevent and stop acts of violence in a smart way and peace, so that students choose a caring and able to participate in efforts to resolve conflicts in society based on moral values, religion, and values are universal, so that students are able to think critically and objectively on the issue of statehood, the issue of ethical attitudes, moral, and democracy , so that students are able to contribute and solutions to various issues of public policy, so that students were able to put the basic values wisely (civilized). Pancasila and Citizenship Education who teaches how one becomes a citizen more responsible. Because it cannot be inherited citizenship for granted but must be studied and experienced by each person. Moreover, our country is heading into a democratic country, then it implies that citizens should be more active and participatory. Therefore, we are as students should learn it, so that we can become the frontline in protecting the country. Garda sturdy that will continue and continue to protect the state although it will be a lot of hindrance barriers ahead.

We all know that the Pancasila and Citizenship Education teach how citizens are not only subject to and comply with the state, but also teaches how citizens actually it should be tolerant and independent in accordance with the values of Pancasila. Education makes every new generation has the knowledge, skill development, and also the development of a public character. The development of communication with the wider environment also involves in Citizenship Education. Although the development can be studied without taking Citizenship Education, it would be better if education is utilized for floating self-widest. High sense of unity, will make us not be so easily swayed by the lure of the glory that it is only temporary. In addition we will not be easily influenced directly culture that does not come from Indonesia and also respect all cultures and values prevailing in our country. Having that attitude certainly cannot we get away without learning, therefore Pancasila and citizenship education is very important for us to learn., For the future should be done

fundamentally change the concept, orientation, materials, methods and evaluation of learning. The goal is for students to build awareness of their rights and obligations as citizens and were able to use the best democratic way and well educated.

Implementing Moral and Ethical Value to the Students

Implementing the value of ethics to the students can be done through:

1. Ethic and Personality Course
   Learning ethics and personality can bring awareness and sensitivity to such issues is growing within organizations and society. Teaching ethics certainly can influence behaviour, but how exactly does it raise awareness and sensitivity. As mentioned above that most of the work of teachers or educational institutions is how to shape the mentality of the students to be honest. Students are human beings who will be the successor intellectual spearhead development relay. Therefore demanded academic responsibility to produce "the fruit of" useful for life environment. Students were most of his time in a campus environment; the learning process can be done through the campus. Coaching ethics can be done on time and it applied ethics courses to honestly look at community life in their respective communities, and report honestly and commented upon the course material Ethics. At the time of learning, teachers can explain how the campus culture, how to embed simplicity, honesty, do not cheat in exams, integrity, and may read a poem that reads conscience. Meanwhile, outside the teaching-learning process is their honesty stalls, bringing students or go to places where community residents cannot afford. These are values education, may not be felt now but have an impact and influence in the future. Thus, teaching ethics to students is timely, because the students as future leaders may lose the trust and confidence of subordinates / subjects for consideration / decision unethical, so the students as future leaders will not be able to be a leader.
2. Extracurricular

In addition to the application of ethical values through formal learning in educational institutions can be obtained through religious education and family. Religious education provided to students at this time, it should be understood, interpreted in depth, and sows kindness in the hearts and turn them into action. With such meanings will be used as the development foundation emotional and spiritual intelligence where conscience is the foundation. Furthermore, family education is a unit that builds the nation and for which the state is built. The family is the place where the child's character is formed, where education begins and is fostered, where the norm of decision-making by the child created. Such a "reflection" in the magazine "Nirmala" 10 / III / October 2001 revealed that: If children live with hostility, he learns to fight. If children live with humiliation, he learned sorry for themselves. If children live with encouragement, he learns confidence. If children live with praise, he learns to appreciate. If children live with the best treatment, he learns justice. If children live with approval, he enjoys himself, and if a child is raised with love and friendship he learns to find love in life.

Implementing morals value to the students can be done through:

1. Learning in Education Environment
   It may include the step orientation / information, giving examples, exercises / habituation, feedback, and follow-up. Such steps are not necessarily sequential, but vary according to need. With such a process, what was initially expected as the knowledge, now the attitude and then change shape transformed into behaviour that is conducted every day. The strategy and the best methods to teach values, morals, and morals to students is by example and exemplary. Prayitno states "human life cannot be separated from impersonation, then in the process of conformity through education, learners who want / wish to enter to organization group. Besides, exemplary as the main teaching, learning the values, morals, and morals in campus need to also use learning methods that touches the emotions and the involvement of students, such as simulation methods and imagination. With this method, the learners will easily grasp the concept of values, morals contained therein.

   As illustration can be examined the example of honesty and tolerance as follows:
   a. Honesty, learning strategies that can be developed through the agreement to be honest, and respect for honesty,
   b. Tolerance learning strategies can be developed through memorize meaningful statement for the needs of others, thus, students who receive the teaching and learning on campus, the importance of the task of lecturers to train and assist the students to develop the potentials that exist in themselves.

The Application of Value, Norm, and Ethic to the Students

Our lives will always be confronted with the term values and moral norms and also in everyday life, not excluding students. We can know that what is meant by social values are values shared by a society, about what is considered good and what is considered bad by the community. For example, a good student is a student who appreciates and respects his teachers. For humans, values serve as the foundation, the reason or motivation in all behavior and actions. Nilaij uga related to the norm, the norm arranged so that the relationship between people in society can be orderly, as expected. Tertiary basic norms in society can be divided into four, namely:

1. How Example: how to speak of students to lecturers are different with talking to peers. The lecturer of PPKn course should insert moral message by giving the task, "Look what the lessons learned in our daily lives on the events of the “Youth Pledge in 1928", and of course all lessons can be formatted in the forms of advice and counsel of goodness.
2. Habit Example: wear neat, clean and courteous to the Campus.
3. Rules of behavior Example: Prohibiting demonstrations that can interfere with teaching and learning activities of students.
4. The customs, for example people who broke the law rules and regulations of the university will be sanctioned in accordance with the regulations contained in the university.

In addition to values, norms and ethics, morals explicitly are matters related to the process of socialization of individuals with

no moral man cannot do the socialization process. Morale in the experienced students now have the implicit value for many students who have moral or immoral attitude from a narrow perspective. Moral is the value of all absolution in society as a whole. It can be emulated in terms of his education. A student who wants to continue her studies but with no funds then he could not get his ideal school did not materialize.

Establishment of learners' morality in the formal education is conducted in the world education. It takes more or less 16 years old (elementary school six years, junior high school three years, high school three years and college less than four years). It is sufficient time to form morality learners in the formation of the desired as learners desired in the formation of morality is upheld it will have a good moral and habits good morality that has been formed will have two properties, the first to provide convenience to the act because it has become a habit, and both save time and attention, because it's almost become a class of human customs that walk on the earth's surface and its value will depend on the habit.

The main task of education is to prepare students towards the maturity of mind by providing knowledge. Students as learners have varying needs, the fulfilment of this requirement is a necessary condition for the development of healthy personal and intact. These needs include the need compassion, need a sense of security, a sense of dignity, freedom, success and want to know. A teacher or professor has a strategic role and great in giving, in condition, create learning situations to be mean, John Dewey as Wasty quoted in Soemanto, wants to change the obstacles in the path of democracy education:

1. Provide opportunities for learners to study individual.
2. Provide opportunities to learn through experience.
3. Motivate, and not a command. This means it will give purpose to explain the direction of learning activities that are basic needs of learners.
4. Students are participated in every aspect of learning activities that are basic needs of learners realize that life is dynamic. Therefore, they should be confronted with a world that is always changing with the independence of their activities, with the orientation of contemporary life.
5. What is useful to man profusely when the man got a good pedagogue and danger will befall him, if the man got a bad educator, as related in the Koran, that man is born in a state of nature, families and the environment that will shape human being broken and useless.

In any educational events, campus environment, especially the teachers teach the importance of getting used to form good habits as it is disclosed that by sowing ideas. It will reap the deed, by sowing works will reap a habit, by plucking habit will form the character or nature of the good, and central is the fate. To strengthen and elevate the moral education, especially their moral or ethics, then there are some things that need to be consider related to the ethics as follow:

1. Spread mental environment, which means constantly striving to learn with power.
2. Consort with those elected, it does not mean refusing to befriend ordinary people but rather to equip themselves with environmental thinking well and

wisely. Because basically lifelike likes to imitate;

3. Read and investigate struggle minded heroes and outstanding; For man to impose himself doing good deeds for the public, to do good is the duty of man, because among other qualities lies in good deeds; What has been delivered in the habit of pressing the soul acts who have no intention except to subdue the soul. And donate with deeds soul familiarize everyday with intention to obey, maintaining strength so it is well received and rejected an invitation. That moral education of students who applied in the campus environment based on the strength of values that it starts with the peace of a clear conscience, the moral education of success are accustomed and forced at first will show results.

The result is the students morally capable of actualizing himself with actions that are not only good but it more to deeds noble behavior, who do not because they want profits, want praise, want to be respected but act based on the Sharia, but also often use common sense he thought. Intellect and impulses are pure digital humans will be formed, the new man in accordance with the order of transcendent (Rukh).

The Role of Moral Education Lecturer

As a teacher Moral Education authoritative, especially in improving the moral development of cognitive students toward the next generation responsible and insightful, the lecturer Moral Education should be aware that students who come to campus have studied little paced moral issues at home rather than families and communities. This situation significantly, students must be given hope and trust that the moral character of the study will give birth to their moral knowledge at the same cognitive moral development continues to flourish. In this way, we can cultivate the values and principles of group life teens to become knowledgeable and disciplined teenager.

In teaching Moral Education subject and Cognitive Moral Development Approach are based on the theory of moral development Kohl, it focuses on stimulating students' moral development of teenagers (students). This approach helps to foster the teenagers' skills in a higher ranking. Bailey and Lee Chang Hoon also stated that moral development in this ranking is more concentrated on the development of moral more characters, attitudes toward moral rules and make moral judgments. In addition, the term of 'development' gives a picture that shows a progressive change into more complex stages. It should not be reversed, then the moral development imagine assumption about what is considered mature in terms of moral. Kohlberg says that it is not the one of the factors that drives moral behaviour but also moral behaviour is the most important factor ever studied and proven to stir moral behaviour.

Lecturer in Moral Education should be responsible for channelling the objectives in line with the implementation of pristine values in the Moral Education among students. Under the draft KBSR and KBSM, pristine values are not applied as moral education but also in all other subjects. In harmony with the National Philosophy of Education, KBSR and KBSM based on the principle elements that allow the potential of individuals develop overall and balanced. Indeed, for achieving the goals of National Education, students will be given the opportunity to

live the values of pure and practice it in their daily lives. This situation is parallel to the cognitive moral developments with regard to the students 'moral judgment' (moral judgment) Kohlberg in Lee Chang Hoon three traits that classify the presence of moral considerations for student groups, namely:

a. Consideration of values rather than facts.
b. social considerations involve consideration of human and;
c. Or prescriptive normative considerations, considerations about the worth, rights and responsibilities and not a value judgment about their own tendencies.

Stints dedication as an educator, is expected that national education can be achieved to produce students who are responsible and have high morals and nobility. The moral value ideas appropriate to be consigned to the idea that is not appropriate for the created formula. The formulation of the results of brainstorming sessions that became suggestions. As formulation may say that Moral Education Teachers play a role of paramount importance in a role model (role model) to students in school through the criteria indicated personality value. A teacher is in the example is not easy it is need solid support than the administrators, other teachers, students and the community as a whole. Nevertheless, in the process of forming the socialization of students there are five major agents who helped bring about a change in themselves, namely the family, peer movement, education (institutions), religion and mass media.

Conclusions

In this globalization era, strong character have a very strategic role in preparing the next generation of qualified high integrity as a nation of Indonesia especially as students. The students have to implement the values, norms, moral, and ethic. In themselves. In addition, through moral education is something that should be given to learners. Even though, moral education is formed from children, but it does not mean that it cannot be implemented at the university. It is expected that as the generation for the future, they have to prepare to be good men and good citizens. The role of teachers and instructional designers is to develop learning strategies which should properly moral give more opportunities for learners to take a moral role, both in the family environment, environmental education, peer environment and wider environment society by providing role models through the process of imitation, where everything has to start from themselves. Moral educators play an important role in the realization of education and as a forum to achieve the desire of the country.

Suggestion

Relating to the major challenges faced by the nation, we need to grow ethical values in our lives. Therefore, the importance of ethical values is in the life of a student. Students are as the hope of the nation, router generation development must unearth that ethics be used as a means of control or become signposts for a person or group in the livers of everyday life, society and the state. So that, in the end it will be able to provide progress and success in building the nation in accordance with the ideals purpose at the opening 1945, that is fair and prosperous society for all Indonesian.

Old Bike Community of Makassar

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ABSTRACT

Basically, humans are social beings who need others to meet their needs by interacting on an ongoing basis so as to form a social group. One of the social groups maintains the culture of previous generation (tradition) by preserving old bicycles (sepeda onthel) in the city of Makassar that is Makassar Old Bicycle Community (KOSTUM). This Research aim at (i) analyzing the causes of Makassar Old Bicycle Community preserve old bicycles (onthel), (ii) determining the form of social interaction among the members of Old Bicycle Community of Makassar, and (iii) finding out interdependencies of the members of Old Bicycle Community of Makassar. This study employed a descriptive qualitative method. The data was collected through observation, in-depth interview, documentation, and triangulation. The results showed that (i) the factors causing Old Bicycle Community of Makassar preserve old bicycles (onthel) due to imitation of the previous generation; (ii) forms of interaction of Old Bicycle Community members was association and cooperation; and (iii) interdependence of Old Bicycle Community members is positive interdependence.

Key words: Community, interaction and interdependencies.

Introduction

Development of human life will encourage each individual to make lasting relationships that ultimately results in social interaction as the opinion of Gillin and Gillin (in Soekanto , 2012: 55) " Social interaction is dynamic social relations concerning the relations between individual, group of people , or even between individual and group of people."

Furthermore, the social interaction occurs between individuals is one of the requirements in forming social group. As the opinion of Soekanto (2012: 101) that "requirement in forming social groups is the existence of reciprocal relationship between one member to another. The process of social interaction also always occurs in a social group that has been formed. It is manifested by a process of interaction, such as contacts, communication, cooperation, accommodation, assimilation and acculturation to achieve a common goal, or even by holding a competition, disputes and conflicts. Thus, the interaction is a key condition in a social group. A social group is actually consisting of individuals who are interconnecting, caring each other, and aware of the existence of a mutual benefit.

The reason someone interacts as the process of forming social group is that there is similarity between individuals with other individuals, as Soekanto (2012, 101) said that "There is a factor owned together so that the relationship between them become tighter. These factors can because of having the same fate, the same political ideology, etc. Certainly, having the same enemy can also be a binding factor/unifier."

Social groups exist nowadays always have a characteristic or group identities in interacting, which generally follow the development of the modern age. However,

not all social groups do this, because there are some social groups which interact without following the development of the modern era, but maintaining the culture of previous generations. One of the social groups is Old Bicycle Community of Makassar (KOSTUM), community which interact by preserving the old bike (onthel) as a unifying symbol of the group members, although they have different level of social status. Symbol here means the group identity or characteristics, namely similar hobby in preserving the old bike (onthel). Old Bicycle Community of Makassar (KOSTUM) was established on April 1, 2005, which is also a branch of the Indonesian Old Bicycle Community (KOSTI), located in Jl. Andi Mangerangi Makassar City which has 280 members (in 2012). They come from various professional backgrounds ranging from pedicab drivers, motorcycle taxi drivers, businessmen, police officers, and others. Mudzakkar as chairman of the Old Bicycle Community Makassar (KOSTUM) describes that "KOSTUM members regularly gather every Sunday in front of Imperial Aryaduta Hotel, Jl. Penghibur, Makassar. In addition, they also gather on Wednesday evening, in front of Mandala Monument, Jl. Jenderal Sudirman". Furthermore, Mudzakkar added, "We also carry out a variety of activities from fun bike, rolling weekly in the city, and touring to several regions in the province". One of the KOSTUM activities is touring outside Makassar City, such as Masamba Solid Louncing, where their old bicycles are trucked to the location.

Research Method

Type of this research is descriptive qualitative method. This research was conducted at various strategic locations as the meeting places for members of Old Bicycle Community members Makassar (KOSTUM), such as in KOSTUM secretariat located in Jl. Andi Mangerangi, KOSTUM gallery, and in front of Mandala Monument. The data were collected through observation, in-depth interviews, documentation, and triangulation. The technique of data analysis begins with data reduction, data display, and conclusion drawing. To check the validity of the data used in this study, triangulation (peer debriefing) was used.

Findings

Factors causing the members of Old Bicycle Community of Makassar preserve the old bike is the imitation to the previous generation. This is indicated by imitation of the present generation to the previous generation by inheriting the old bike which has of cultural and historical value.

In relation to it, an informant who serves as general Chairman of Old Bicycle Community of Makassar, Muzakkar (48 years), said that:

Old Bicycle Community of Makassar is an organization for them who love and preserve the old bike. It means that old bicycles are unique items that had to be passed on to our generation, wither previous generations, present, or even future generations because if we want the old bikes still exist, there must be people who want to love the bicycle so it doesn't extinct, and the cultural and historical values are not lost (interview on March 24, 2013).

Then, further interview was conducted with the General Secretary of the Old Bicycle Community of Makassar, Irfan Mus (26 years old), revealed that:

Lovers of old bikes is indeed want to preserve the old bike (onthel) because we

think that the Old bike this is the cultural heritage of our ancestors then is the motto also means there is a life motto is simple with cycling that we avoid any thoughts of our lives which bermewah - luxuries (interview on 16 April 2013)

In an effort to preserve the old bike (onthel), a member of Old Bicycle Community of Makassar (KOSTUM), they continuesly interact with internal or external groups, with associative form in the interaction of members of Old Bicycle Community of Makassar (KOSTUM), leads to the formation of associations or guilds insiders of Old Bicycle community of Makassar (KOSTUM).

The form of interaction of KOSTUM is associative with the cooperation among members of KOSTUM built with the principles of togetherness and family. Besides fun bike event held frequently there is also regular meetings among members of KOSTUM. This is also what makes this community can continue to survive in preserving the old bike.

In relation to it, an informant who serves as Chairman of KOSTUM, Muzakkar (48 years), said that:

If to preserve its cooperation itself, friends agree, that indeed we should be together, we must create kinship. Because with togetherness the bike that exist today can not lost and still defended, because togetherness is what makes us exist. (Interview on March 24, 2013)

Then, more interviews were done with the General Secretary of the Community Bicycle Tua Makassar (KOSTUM), Irfan Mus (26 years), who said that:

Kalau dari segi kerjasama kita melestarikan sepeda tua teman-teman di komunitas sepeda tua ini rata-rata merawat sepedahnya hingga memelihara dengan apa namanya melaksanakan fun bike atau pertemuan-pertemuan sepedahnya (Interview on 16 April 2013)

The interdependence fellow of the members of KOSTUM is positive instead of negative. Interdependence or dependence among members of KOSTUM is indicated by the increase mutual cooperation in preserving old bikes through the provision of motivation to keep the spirit in defending the hobby of collecting old bike. It is represented by selling a wide range of accessories and spare parts of bicycle because it is very hard to find spare parts of old bike at this time with the aim to be consistent to join the KOSTUM. According to the Chairman of KOSTUM, Muzakkar (48 years old), that:

Jadi organisasi ini sebenarnya organisasi hobi. Jadi kita perlu tahu bahwa ini adalah organisasi hobi yang disitu bagaimana teman-teman punya karakter yang berbeda-beda, ada yang memang ingin istilahnya masuk di sepeda tua ini hanya mau memakai sepeda tua, ada memang yang disitu karena dia hobi, atau karena di situ istilahnya jadi kolektor. Jadi mereka disinilah mereka terbentuk, berhimpun masuk pada garis itu, mereka disitu untuk bagaimana supaya mereka bisa sepeda tua yang dia pakai itu yang dipunyai sekarang ini tetap semangat (Interview on 24 Maret 2013)

Furthermore, in addition to the positive interdependence, it is also shown by mutual support among the members of KOSTUM. This is proven by their tolerance by not imposing the will of the Chairman to the members of KOSTUM. Although there is structural organization but the hierarchy is flexible, so that it provides an opportunity for members to give their opinions and work based on

their will, though not apart from supervisory board of chairman or above as the responsible organization. According to the Chairman of KOSTUM, that:

(...) untuk bisa mempertahankan itu ketergantungan antara anggota-anggota itu bagaimana semua anggota antara bawahan dengan atasan itu saling istilahnya toleransi istilahnya. Dalam hal ini kami di Komunitas Sepeda Tua Makassar (KOSTUM) itu sama semua tingkatan antara ketua dengan anggota itu sama, tidak ada istilahnya tidak sama dengan organisasi lain, tidak ada apa namanya ini perbedaan. Walaupun dalam struktur ada, bahwa dalam kepungurusan ada, tetapi dalam hirarkiannya mereka tetap sama. Jadi apapun pendapat mereka kami terima saran kami istilahnya mereka kita tanggapi bahwa mereka kebebasan silahkan kami memberikan apa namanya ini untuk bisa berbuat mereka bisa bercipta berkarya apa yang mereka inginkan silahkan, itulah ketergantungan antar teman. (Interview on 24 March 2013)

Besides interdependence or dependence occurs among the members of KOSTUM, there is also dependence between the members of KOSTUM and Makassar citizen. This is proven by the positive response in the form of interest of Makassar citizens to learn more about and even want to join in KOSTUM itself, as stated by the General Secretary of KOSTUM that:

Kalau masalah ketertarikan atau ketrgantungan masyarakat alhamdulillah respon positif yang diberikan oleh masayarakat tentang adanya Komunitas Sepeda Tua Makassar (KOSTUM) ini bagus bahkan masyarakat juga banyak mendukung kegiatan-kegiatan kami banyak yang tertarik dengan komunitas kami bahkan mereka juga banyak yang bergabung alhamdulillah mereka bahkan apa kadang bertanya di mana di dapat ini sepeda kenapa bisa dapat mereka penasaran seolah- olah pemikiran mereka itu sepeda beginian sangat sulit untuk didapatkan jadi mereka justru penasaran dan bahkan ingin bergabung sampai detik ini kan juga jumlah anggotanya sudah lumayan ada ratusan orang karena itu ketertarikan bersama-sama melestarikan budaya (Interview on 16 April 2013)

The interdependence of the members of KOSTUM is positive. Interdependence between members of KOSTUM is indicated by the increase of mutual cooperation, motivation to keep the spirit in defending the hobby of collecting bicycles old bicycle (onthel) by selling a wide range of accessories and spare parts which are very difficult to find at this time with the aim to be consistent to join in KOSTUM. Furthermore, the attitude of tolerance by not imposing the will of the Chairman to the members of KOSTUM by providing the opportunity to give their opinions and work based on their will, even though there is still any monitoring from the Chairman or the board as the responsible organization. Besides interdependent among the members of KOSTUM, there is also interdependence between the member of KOSTUM and Makassar citizens. It is proven by the existence of positive response where they are interested to learn more about and even want to join the KOSTUM itself.

Discussion

Factors causing KOSTUM preserve the old bike (onthel) can be analyzed with the Theory of Formation of Social Groups, namely Theory Practical Reasons put forward by Reitz (Huraerah et al, 2006:

29) which emphasizes on the motives / intentions of the group. This theory refers to Maslow's needs (Huraerah et al, 2006: 29), which according to the practical theory "the group itself is the source of needs". According to Hurerah et al. (2006: 29), in this theory "these groups tend to provide the satisfaction of fundamental social needs for the people in group. The practical values of this theory were based on certain reasons, such as economic reasons, social status, security, political and other social reasons."

From Practical Reasons Theory proposed by Reitz, it can be related to the reasons of KOSTUM preserving the old bike (onthel), that is the imitation of culture of previous generation with the purpose to meet social needs in the form of hobby to inherit the old bike (onthel) which have cultural and historical value and the value of the simple life, as explain by Muzakkar (48 years old) that:

Komunitas Sepada Tua Makassar (KOSTUM) Organisasi yang bergerak sepeda tua, yang khususnya mencintai dan melestarikan daripada sepeda tua itu sendiri. Atinya sepeda tua adalah barang langkah yang memang harus diwariskan kepada generasi kita baik generasi yang lalu, sekarang dan maupun akan datang karena kenapa kita harus mempertahankan? karena kalau kita mau tetap eksis sepeda tua (onthel) harus ada orang yang ingin mencintai sepeda onthel sehingga tidak punah. dan tidak hilang karena ada nilai budaya dan nilai historisnya yang memang terkandung di dalam sepeda onthel itu sendiri.(Interview on 24 March 2013)

Then, it is also held an interview with one of the members of KOSTUM, Masrul (32 years old) who said that:

Komunitas Sepada Tua Makassar (KOSTUM) adalah wadah tempat berkumpulnya teman-teman yang sehobi utamanya penghobi sepeda tua. (Interview on 03 April 2013)

From the interview with the General Secretary of KOSTUM, Irfan Mus (26 years old), it is found that:

Warisan budaya dari nenek moyang kita kemudian merupakan semboyan juga artinya ada semboyan hidup sederhana dengan bersepeda itu kita menghindari apa pemikiran-pemikiran hidup kita yang bermewah-mewahan (Interview on 16 April 2013)

Furthermore, in analyzing social interaction among the members of KOSTUM, it is used Structural Functionalism Theory. This theory is used to understand associative social interaction or integration of the members of KOSTUM. In KOSTUM, there is also change, either structurally or culturally. However, the members of KOSTUM always keep the harmony of organization, keep cooperation, and avoid conflict resulted from the changes. Based on the Structural Functionalism Theory explained by Merton in Poloma (1979:35) that “the first postulate is the functional unity of society which can be defined as "a situation in which all parts of the social system work together in harmony or internal consistency levels were adequate, without producing the longstanding conflict which can not be resolved. Merton asserts that the perfect functional unity of the community is "contrary to fact". As an example, he cites some habits of the people which can be functional for some groups (support integration and cohesion of a

group) but dysfunctional (accelerating destruction) to another group."

The relationship between the structural functionalism theory proposed by Merton in the first postulate with associative social interactions of the members of KOSTUM is there is functional unity found in the Old Bicycle Community of Makassar containing positive elements, namely the function in supporting the integration and cohesion among the members of old bicycle community Makassar (KOSTUM) through collaboration by consistently maintain alignment with the principles of togetherness and family so it's also what makes this community can continue to survive in preserving the old bike (onthel).

In relation to group function, the chairman of KOSTUM says that:

Kalau untuk melestarikan kerjasamanya itu sendiri, teman-teman ini istilahnya sepakat, sependapat, bahwa memang kita harus bersama, kebersamaan yang harus kita bina, kekeluargaan yang harus kita ciptakan. Karena kenapa? dengan kebersamaan itu sehingga sepeda yang ada sekarang ini itu tidak bisa istilahnya, hilang dan tetap kita pertahankan, karena kebersamaan itulah yang membuat sehingga keberadaan kita ini utuh dan tetap eksis untuk kedepan. (interview on 24 March 2013)

In relation to conflict happens between KOSTUM and KOSTI of South Sulawesi, Muzakkar argued that:

(...) Nah dari konflik itu bahwa Komunitas Sepada Tua Makassar (KOSTUM) yang sebagai peletak dasar yang ada di Sulawesi Selatan nah inikan tentunyakan banyak keinginan kita pada saat terbentuk yah banyak keinginan-kinginan daripada anggota yang menginkan bahwa, mereka juga membentuk-membentuk apa (klub- klub), maka yang tadinya KOSTUM sebagai induk dari pada mereka, akhirnya membentuk klub-klub, sehingga mereka tergabung yang namanya KOSTI Komunitas Sepeda Tua Indonesia yang berada di istilahnya ditingkat wilayah artinya Sulawesi Selatan. Olehnya itu Komunitas Sepada Tua Makassar (KOSTUM) yang tadinya sebagai induk nah ini mereka mendapatkan kurang enaklah kurang diperhatikan dari teman-temannya sendiri yang pada saat itu sehingga terjadilah konflik, bahwa apa yang mereka inginkan ditemannya terbentuknya itu tidak diharapan sehingga mereka keluar tidak bergabung dari KOSTI itu sendiri jadi tetap KOSTUM berdiri tanpa istiahnya mencampuri urusan ekternalnya mereka (KOSTI) baik secara organisasi maupun secara perorangan (....)." (Interview on 24 March 2013)

In addition to the first postulate, there is also second postulate proposed by Marton in Poloma (1979:37) in functional analysis: "The second postulate is universal functionalism, related to the first postulate. Universal functionalism considers that "all standard forms of social and cultural have positive functions". As we already know that Merton introduced the concept of dysfunction and positive function. Some social behaviors are obviously dysfunctional. Merton suggested that cultural elements should be considered based on balanced criteria of functional consequences.

The relationship between the structural functionalism theory proposed by Merton in the second postulate with associative social interactions of the members of Old Bicycle Community of Makassar is that the need to consider all standard social and cultural forms in Makassar Old Bicycle

Community through the principle of "one stock, one bike, one friend, one onthel, one brotherhood". By having a positive function as a unifying symbol of members of Old bicycle Community Makassar so that the consequences of a function or dysfunction causing conflict within the group can be avoided so that the goal of preservation of old bikes is reached. Muzakkar states that:

(...)Pencegahan (Konflik) untuk bisa kita selesaikan bersama-sama karena dengan seperti itu, bahwa kita punya konsep yang itu tadi kekeluargaan dan kebersamaan itu yang kita jaga. karena kenapa, ada satu kita punya prinsip bahwa satu sepeda, seribu teman, tetapi sekarang dipakai satu stock satu sepeda, satu teman, satu onthel satu persaudaraan, jadi saya kira kalau kita artikan. Satu-satu seribu seratus sebelas artinya bahwa satu onthel satu sepeda banyak persaudaraan. (Interview on 24 March 2013)

In addition to the second postulate, Marton in Paloma (1979, 37) suggested the third postulate in functional analysis, that is: "the third postulate complete three functionalism postulates, namely indispensability. He argued that "in every civilization, such as habit, idea, material object, and beliefs have some important functions, have some duties to do, and become the unseparatable part from the whole system of activity.

The relationship between the structural functionalism theory proposed by Merton on the third postulate with associative social interactions of the members of Old Bicycle Community of Makassar is that theer is external structure of the organization in Makassar Old Bicycle Community which starts from the Community of Old Bicycle of Indonesia (KOSTI) which centre based in Jakarta, then Indonesia old Bicycle Community (Kosti) in Provincial level, and old Bicycle Communities (onthel) in the district/city in which all of these structures have their respective functions. The general secretary of KOSTUM states that:

ada KOSTI Indonesia Komunitas Sepeda Tua Indonesia, ini pusat KOSTI ini punya Kosti-Kosti di provinsi-provinsi, nah Kosti-Kosti di provinsi ini punya Kosti di kabupaten-kabupaten. Nah siapa anggota-anggota di Kosti Kabupaten ini adalah komunitas-komunitas yang ada di kabupaten itu, siapa anggota Kosti di propinsi adalah kosti- kosti kabupaten, siapa anggota kosti pusat adalah kosti-kosti di propinsi. Di Makassar ada tujuh komunitas sepeda tua, kalau tujuh kosti itu bersatu bisa bentuk kosti propinsi (Interview on 16 April 2013)

The conclusion is that the Old Bicycle Community of Makassar is formed based on the structure or division of positions who have their respective functions with mutual dependence among members of the community of Old Bicycle Makassar. Therefore, if there is a change in the structure or if there is a conflict, it will affect the cooperation in the substructure or the other members of old Bicycle Community of Makassar in preserving the old bike (onthel).

Furthermore, in analyzing interdependencies of the members of Old Bicycle Community of Makassar, the researcher used the concept of a community sentiment, as suggested by Maclever & Charles in Soekanto (2012: 134) as follows: "Empathy. Elements of sympathetic arise from someone who try to identify himself with as many people in the group so that all of them can be described himself as "a group of us", "our feelings" and so on."

The relationship between the concept of community sentiment is "sympathetic" espoused by Maclever & Charles with interdependence among members of Old Bicycle Community of Makassar that is the same feeling among the members of Old Bicycle Community of Makassar through imitation or impersonation of group unity. This is indicated by the similarities in the hobby of collecting old bicycles (onthel), which also affects the personality of the members of Old Bicycle Community of Makassar to be integrated with the principle of one friend, one onthel, one brotherhood. As the interview with a member of the Old Bicycle Community Makassar, Masrul (32 years old) that:

Komunitas Sepada Tua Makassar (KOSTUM) adalah wadah tempat berkumpulnya teman-teman yang sehobi utamanya penghobi sepeda tua. (Interview on 03 April 2013)

Then, the interview with the chairman of KOSTUM, Muzakkar, reveals that:

Ada satu kita punya prinsip bahwa satu sepeda, seribu teman, tetapi sekarang dipakai satu stock satu sepeda, satu teman, satu onthel, satu persaudaraan, jadi saya kira kalau kita artikan. Satu-satu seribu seratus sebelas artinya bahwa satu onthel satu sepeda banyak persaudaraan. (Interview on 24 March 2013)

In addition to having the same feeling, there is also the concept of having the same responsibility based on Maclever & Charles (in Soekanto, 2012:134) that: "every individual should aware with their roles.

The relationship between the concept of community sentiment that is having the same responsibility proposed by Maclever & Charles with the interdependence of the members of KOSTUM that there is an awareness of the members about their position in community to carry out their roles and responsibilities. It is indicated by not imposing the will of the chairman to the members of KOSTUM, even though there is structural organization but the hierarchy is flexible, so that it gives opportunity for the members to express opinion and work based on their will, even though it is still in supervision of the organization.

Then, the interview is conducted with the chairman of KOSTUM who said that:

(...) untuk bisa mempertahankan itu ketergantungan antara anggota-anggota itu bagaimana semua anggota antara bawahan dengan atasan itu saling istilahnya toleransi istilahnya. Dalam hal ini kami di Komunitas Sepeda Tua Makassar (KOSTUM) itu sama semua tingkatan antara ketua dengan anggota itu sama, tidak ada istilahnya tidak sama dengan organisasi lain, tidak ada apa namanya ini perbedaan. Walaupun dalam struktur ada, bahwa dalam kepungurusan ada, tetapi dalam hirarkiannya mereka tetap sama. Jadi apapun pendapat mereka kami terima saran kami istilahnya mereka kita tanggapi bahwa mereka kebebasan silahkan kami memberikan apa namanya ini untuk bisa berbuat mereka bias bercipta berkarya apa yang mereka inginkan silahkan, itulah ketergantungan antar teman. (....) (Interview on 24 March 2013)

Then, in addition to having the same responsibility, there is also a feeling of need each other in the concept of community sentiment, as argued by Maclever &

Charles (in Soekanto, 2012:134) that: "Mutual require. Individuals who are members of the local community feel that he depends on the "community" including both physical and psychological needs."

The relationship between the concept of community sentiment that is mutual require proposed by Maclever & Charles with the interdependence of the members of KOSTUM that community members need the group to meet the physical and psychological needs. Physical needs done with complementary wide range of accessories and spare parts of the old bikes owned because spare parts are very hard to find, and at the same time fulfilling a psychological need because they can fulfill the hobby of loving old bike. In relation to this case, Muzakkar states that:

Jadi organisasi ini sebenarnya organisasi hobi. Jadi kita perlu tahu bahwa ini adalah organisasi hobi yang disitu bagaimana teman-teman punya karakter yang berbeda-beda, ada yang memang ingin istilahnya masuk di sepeda tua ini hanya mau memakai sepeda tua, ada memang yang disitu karena dia hobi, atau karena di situ istilahnya jadi kolektor. Jadi mereka disinilah mereka terbentuk, berhimpun masuk pada garis itu, mereka disitu untuk bagaimana supaya mereka bisa sepeda tua yang dia pakai itu yang dipunyai sekarang ini tetap semangat (Interview on 24 March 2013)

The relationship between the concept of community sentiment that starts from sympathetic, shaving the same responsibilities and need each other to the interdependence of the members of Old Bicycle Community of Makassar can only be seen through three elements.

Conclusion

Based on the findings and discussion that has been mentioned in the previous chapter, the conclusions of the study are as follows: (1) factors causing KOSTUM preserve the old bike (onthel) for their imitation of the previous generation as a heritage to be preserved for historical and cultural value; (2) the interaction of KOSTUM members is associative which is indicated by their mutual co-operation; (3) interdependence of KOSTUM members in Makassar is positive interdependence. It is realized by improving mutual cooperation, motivation to keep the spirit in defending the hobby of collecting old bike (onthel) is still running. Besides interdependent among the KOSTUM members, there is also interdependence between the members and Makassar citizens, especially residents of Makassar give positive response in the form of interest in learning more about and even want to join the KOSTUM itself.

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Panel Session (PowerPoint Presentation):

New Academia Learning Innovation (NALI)

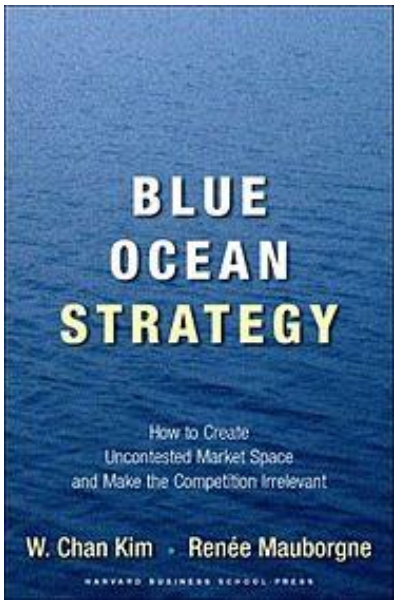
Yusof Boon, *(Universiti Teknologi Malaysia, Malaysia)*
Deputi Dean (Research and Innovation), Faculty of Education

Introduction

Educational Philosophy

- … For the object of education is to teach us to love beauty. (Plato)
- Everything we do not have our birth and which we need when we are grown is given us by education. (Rousseau)
- The only thing that interferes with my learning is my education. (Albert Einstein)
- All who have meditated on the art of governing mankind have been convinced that the fate of empires depends on the education of youth. (Aristotle)

Blue Ocean Strategy (BOS)



- Make the competition irrelevant
- Create and capture new demand
- Break the value/cost trade off
- Align the whole organization in pursuit of differentiation and low cost

HE Blue Ocean Strategy (BOS)
Eliminate
High tuition fees
Plagiarism
Non-performers

Raise
Citation / publications
Research facilities
Internet facilities
Internationalization
World class campus experience
Co-branding
Efficiency and transparency

Reduce
Local-centric
Red-tapes and layers

Create
New academia
Job creation

How Generation Y Students Learn

Tech-Savvy: Generation Y grew up with technology and rely on it to perform their jobs better. This generation prefers to communicate through e-mail and text messaging rather than face-to-face contact and prefers webinars and online technology to traditional lecture-based presentations.

Achievement-Oriented: Generation Y is confident, ambitious and achievement-oriented. They want meaningful work and a solid learning curve.

Team-Oriented: Generation Y is loyal, committed and wants to be included and involved. They value teamwork and seek the input and affirmation of others.

Attention-Craving: Generation Y craves attention in the forms of feedback and guidance. Generation Y may benefit greatly from mentors who can help guide and develop them.

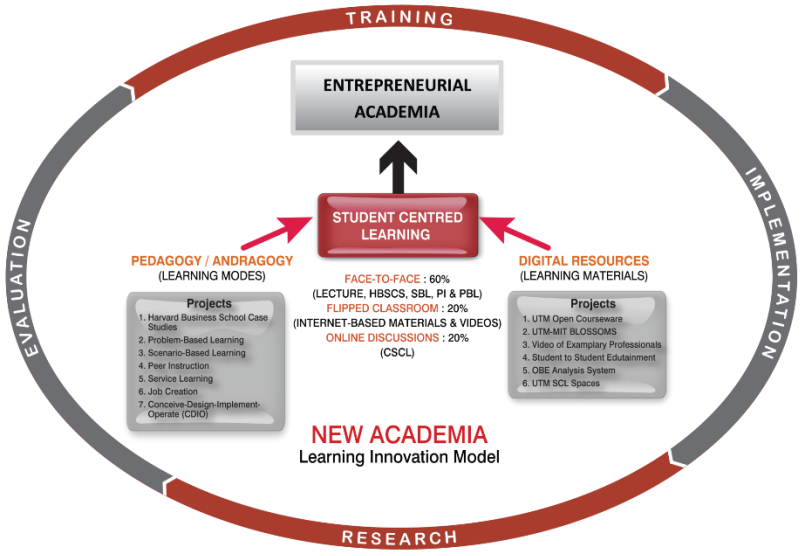
New Academia Learning Innovation Model

What is New Academia?

New Academia is a framework comprising new philosophy and new approaches towards achieving effectiveness in teaching and learning.

What is New Academia Learning Innovation Model?

New Academia Learning Innovation Model is a framework comprising student-centered and blended learning philosophy, multiple learning modes and materials towards achieving effectiveness in teaching and learning.



New Academia

	New academia	Action
Faculty members	Professors, inventors, entrepreneurs	Adjunct staff, fellows
Learning materials	Books, journals, experiences, Internet, internship	Internship, students' business venture
Philosophy	Integration	New pedagogy, RA
Funding	Grants, fees, VC, endowment	Creative fund raising

Students	School leavers, mid-career, businessmen, early-career, life-long	Top UG; PG from corporations, research
Venue	Campus, Internet, incubators, brands	Wi-Fi, 4G, MTDC, Proton
Learning modes	Lectures, tutorials, lab, studios, peer instruction, internship, incubators, experiential learning	NEW PEDAGOGY: learner-centric, Silicon V-culture, GOP, ethics
Outcomes	Degrees, expertise, business models, capital, networks, culture	JOB CREATION; micro-credit, spin-off, projects

New Academia – Learning Modes

- Harvard Business School Case Teaching (HBSCS)
- Problem Based Learning (PBL)
- Scenario-based Learning (SBL)
- Peer Instruction (PI)
- Service Learning (SL)
- Job Creation (JC)
- Conceive, Design, Implement, Operate (CDIO)

New Academia –Learning Materials

- Open Course Ware (OCW)
- MIT BLOSSOMS (Blended Learning Open Source Science or Mathematics Studies)
- Video of exemplary professionals
- Student to Student Edutainment

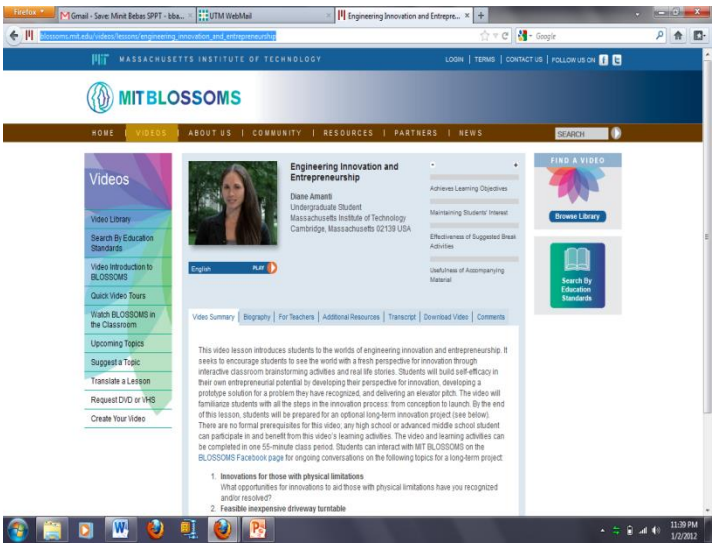


Figure 1. MIT Blossoms

Figure 2. MIT Open Courseware

Figure 3. UTM Open Courseware

Conclusion

Transforming Students Learning

Ready or not …

The World is Different

Kids are different …

Learning is different …

And Teaching Must Be Different, too

(ISTE, 2000, pp. 1-2)

Education in Australia

Patrick Direen, *Australia*

Introduction

Formative Years were in Tasmania
I went to a private schools from Kindergarten to year 10
Year 11 and 12 were spent at a Government School
Undergraduate -University of Tasmania
Short Courses at the Australian National University, Canberra
Masters -University of New England

Educational Experience: Indonesia

Student Exchanges

- Univeristy of Mataram (2011) - 2 months
- Sanata Dharma University (2012)- 1 Semester
- Parahyangan University (2012) -1 semester
- Universitas Ahmad Dahlan, Yogyakarta

Teaching Practicum: John DeBrito College -2012

- An overview of the Australian system
- Personal Experience/Observations
- Scholarships for International Students

The Australian System:

- An overview:

11 years of compulsory education
Primary school - Runs for seven or eight years, starting at Kindergarten/Prep (amatory school) through to Year 6-7.
Secondary school - Runs for three or four years, from Years 7 to 10 or 8 to 10.
Non Compulsory education:
Senior secondary school ("College" in some states of Australia) - Runs for two years, Years 11 and 12.
Tertiary/TAFE (technical school)
63.3% of students enroll in tertiary education

Educational Experience: Australia

- Every year had tests, but no major exams until the end of year 10. These exams would determine what subjects a student could enroll in for Senior high school.
- Exams in both year 11 & 12 to determine scores for university entrance.
- There is also an option of year 13 for students who did not get the score they wanted. College also had 'mature-aged students.'

Senior High School/ "College":

- Designed to make students ready for life after graduation.
- A significant focus on independence and personal responsibility. For example, students are not asked to submit their assessment tasks, it is the responsibility of the student to meet the requirements.
- Teacher-student level shifts with a more relaxed relationship. Calling teachers by their first name, no uniforms for Government schools.

Gap-Year

Rather than going directly to university, 15% of students choose to take a gap year which generally involves either working or travelling.
This is because many students feel **burnt out** after 12 years in the classroom, their

year 12 plans do not work out, or they do not know what they want to do.

Many gap year programs have been developed to give year 12 graduates a taste of life.

Example programs include:

- Volunteering (domestically and abroad)
- ADF (Australian Defense Force) Gap Year
- Student Exchanges
- Professional Internships

This kind of experience also looks good on university applications.

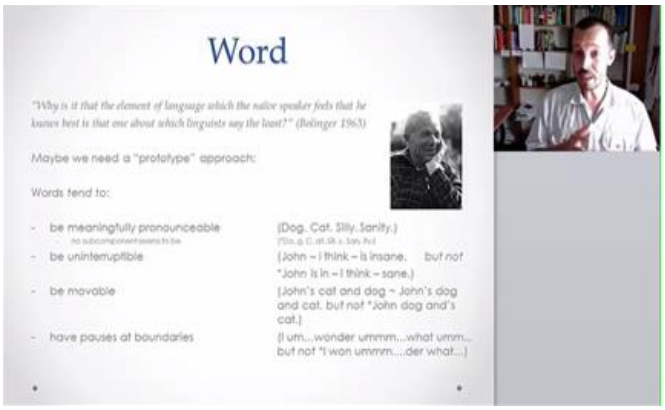
University System- Undergraduate Experience

- From my experience, university in Australia is less task-focused, but possibly more reading-focused.
- **Lecture/Seminar/Practical/Tutorial System**
- **Lecture:** Theory delivered (Teacher focused; students can ask questions, but often the other students will be annoyed)
- **Seminar:** More open forum
- **Practical**- for lab work/research (Science/Psychology/Engineering)
- **Tutorial System:** Small groups, usually around 8 students + a tutor (often a PhD candidate). Discussion of readings and questions from the lecture.
- Lectures are generally non-compulsory and video recorded because many students work day jobs. Generally tutorials/pracs/seminars are compulsory and attendance is recorded.
- In Australia there is a very relaxed student/teacher relationship. Lecturers are often called by their first name.
- No dress code for most Australian universities, although individual lectures might dictate their preferences.

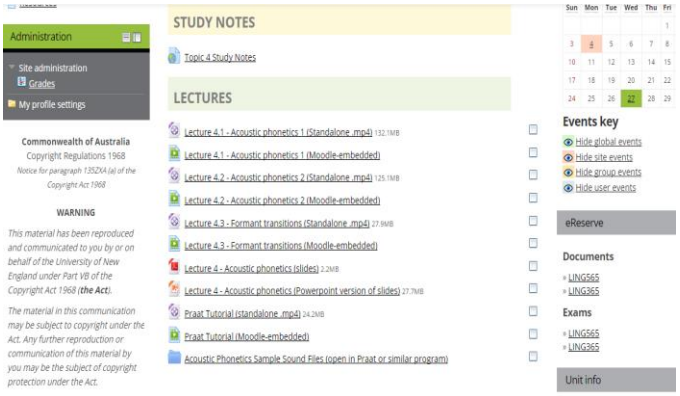
University of New England

- Specialises in Online degree courses
- Uses a Trimester system
- Focus is on providing flexibility for study. So you can study wherever you want, whenever you want, whatever you want.
- Flexibility means that everyone can study, housewives, people with full time jobs, people who live/work overseas.
- Located in Armidale, NSW

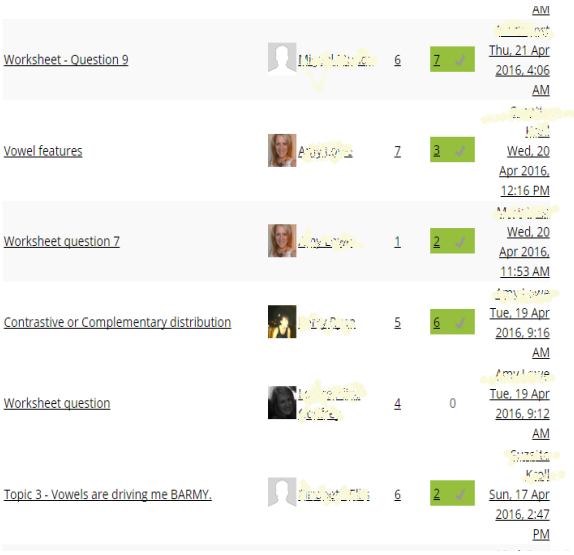
Online Lectures



Moodle:



Forums:



Payment:

- Up-front payment or government loan (FEE-HELP).
- Government loan repayments are taken automatically from a student's tax educations when they begin to earn more than $40,000 per year.
- Some degree programs are subsidised by the government-Commonwealth supported places (CSPs). These usually target/strategic areas.
- International Students: Sometimes it can be much more expensive, sometimes double.

Differences:

- In Indonesia I feel that there is more pressure on students to graduate and to graduate 'quickly.'
- In Australia we don't count semesters or how many years people have been studying. No concept of 'angkatan lama' or what year you started studying.
- The length of courses: A Bachelor Degree in Australia is 3 years, without a thesis.
- Thesis is generally optional and called an 'Honours Year' this can be seen in a person's title e.g. B.A (Hons)
- Double degrees + Double Majors

- Mature-aged students: A culture of switching jobs multiple times in your life time.
- It's quite common for Australians to switch their streams and this does not effect them too much when they enter the workforce.
  Indonesian studies -> Linguistics
  International Relations -> Education/IT
- In the Indonesian system, I feel like there is a much greater chance of 'redemption.' This is something that I wish the Australian system would adopt. Getting a make-up task or re-taking an exam.
- Level of Formality - possibly a reflection of cultural differences

Dress, addressing lecturers

- Academic integrity is quite strict; this shocks a lot of international students when they first arrive.

- Referencing and

- Invigilated Exams (3rd party)
  - Workload: Australia has usually 3-5 subjects per semester. Each subject has around three pieces of assessment.
  - Group tasks (Indonesia) vs individual tasks/essays (Australia)
  - Personally, I feel that University in Indonesia is more social and people are more active in student organisations.

In Australia, many students attend classes and then go home or go to work. There are student organisations, but people are not as active.

- Living on Campus
- Grading System:

High Distinction (HD) 80%+

Distinction (D) 70%+

Credit (C) 60%+

Pass (P) 50%+

Education in Japan: Future and English Language

Momoka Yunoki, *(University of Tokai, Japan)*

Education is a preparation for future, there are some cases that face by Japanese Government, such as:

1. The birth number is low and Long age

Inhabitants

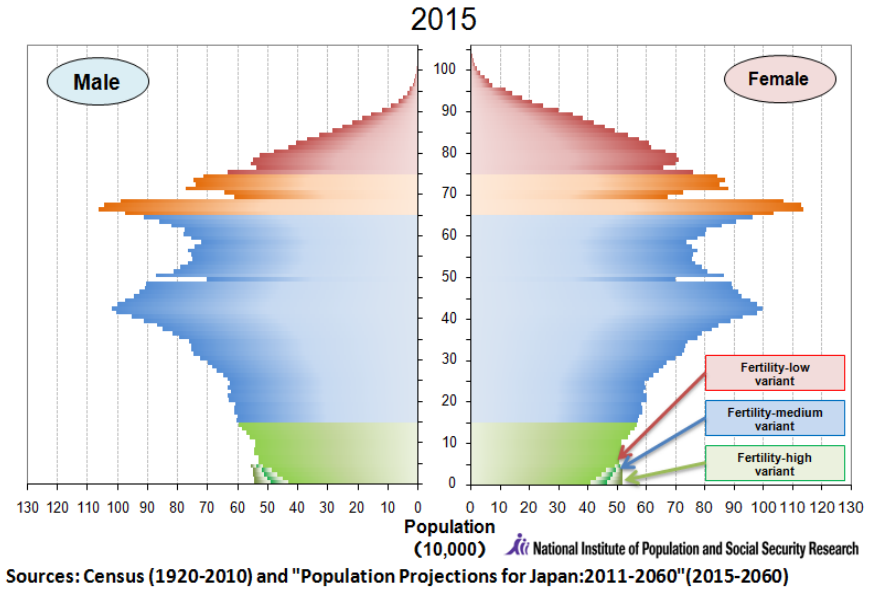


Figure 1. Population of Japanese Inhabitants in 2015

10 Years Later

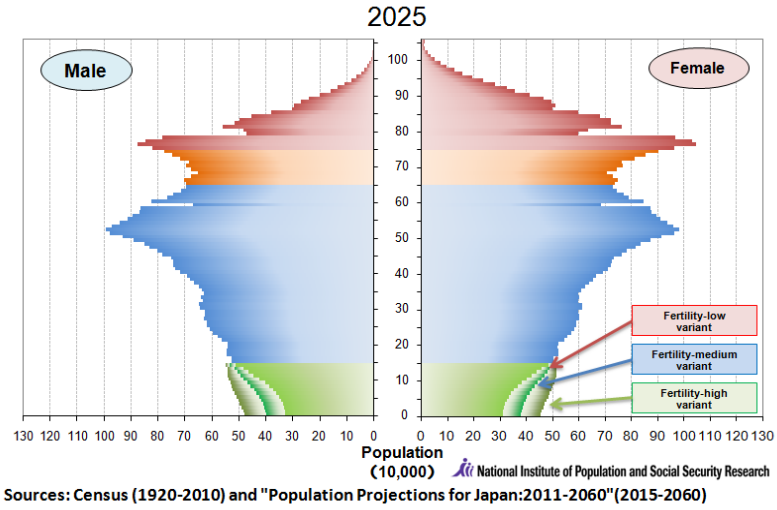


Figure 2. Population of Japanese Inhabitants in 2025

2. Tokyo Olympiad
   Until 2020, the total number of foreigners who come to Japan are 20 Million people based on the prediction.

Thus, based on the two points above showed that the Japanese people must prepare education for the number of birth and age (population) and the Olympiad. The Education in Japan concerns Foreign Language Education, especially English Language.

The education level and compulsory school are Early childhood education (age 4-6 years old), Primary Education (7-12 years old); mostly the duration is 6 years. Junior High School for years (13-15 years old).

Then, the senior high school for 3 years (15 years old) and University for Bachelor degree and Graduate Degree.

Basic of Life Regularly

1. Schedule
   a. Japanese Language
   b. Math
   c. Life
   d. Sport
   e. Music
   f. Arts and Handicraft
   g. Morality
   h. Lunch time
      1) Provided by expert of science of nutrition
      2) Preparing lunch time
   i. Cleaning School
   j. Take a rest
2. Self-Cleaning
3. Cooperation

English Education

At the Middle class of Primary School

English is making good acceleration for educational environment with International language, at class 5-6 of Primary school, the students want to use English at out of class but usually their parents cannot satisfy the language practice for students. So, this is the problem in Japan for the students when they want to practice the language.

At the Junior High School

The English Education in this level is extracurricular activity at school. Practicing English after formal class and the school chooses good teacher to teach English in the classroom and school has standardized in selecting them. One of the requirement is TOEFL is more than 80 points.

At the Senior High School

The kind of High school in Japan is various, they are *general school, Credit system, Vocational school, general major, part time, communication system, and Supporting school.* All of them can be found at the College of Technology. The number of student to study at University, can be shown below:

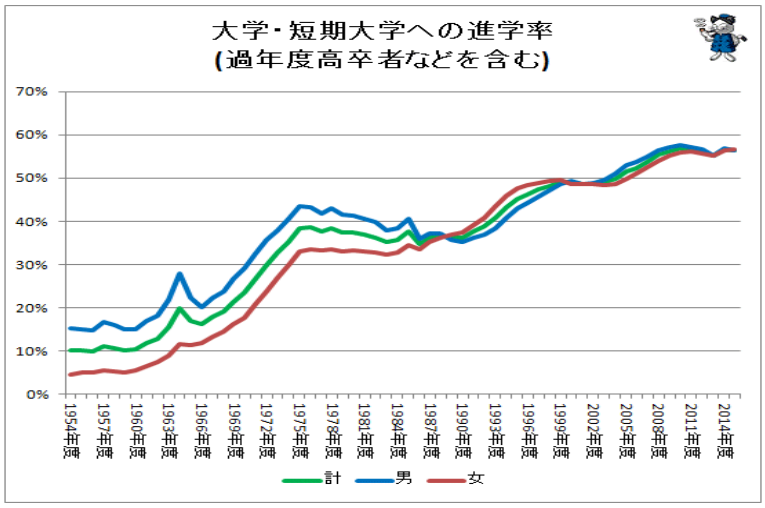


Figure 3. Student Population at University

At the University

The selection of University in Japan is very difficult, but it could be easy to complete all subjects in University.

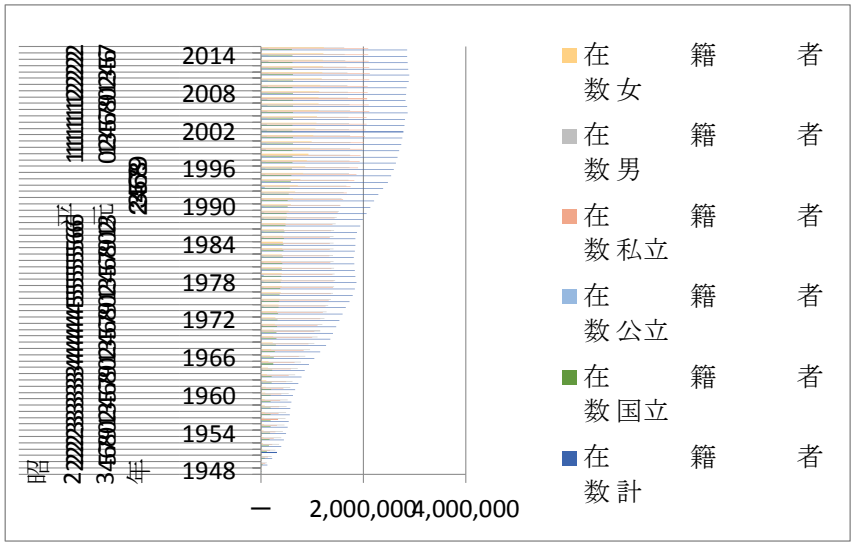


Figure 4. The Selection in Japanese University

The alumni of University is the highest percentage in working in Japan, the second position is the College of technology, and the next is High school and Junior school.

Additional Paper:
Language Studies, and Civics

Human Existence In The Collection Of Poetry Anwar Works: Study Of Semiotic

Andi Hasniar Asfar, Andi Sukri Syamsuri, *(Muhammadiyah University of Makassar)*
Email: niarandi.asfar@yahoo.co.id

ABSTRACT

This research objective is to find the human existence of the poem from semiotic point of view. This research is a literature review research. This research design is research analytic descriptive. The data of the research is the poem composed by Chairil Anwar which consists of three poems. The result of the research show that the three poems describe sign concerning human existence. There are three kinds of meaning found of the human existence namely (1) human and he himself, (2) human who realize his weaknesses, and (3) human who realize the deadness.

Keywords: poem, semiotic, human existence.

Introduction

Literary works written by the poet either prose or poetry in the form of today is quite a lot. One form of literature is poetry. Poetry as a form of literary work is different from other forms of literature. Lies the difference can be seen the language is far denser than the prose. Poetry is basically able to describe universal human problems, the question of the nature of life, human nature, death and divinity.

Anwar has brought the color development of the Indonesian language and literature. Waluyo (1987: 36) said that the idea of realism and expressly expressionism blaze in the works Chairil Anwar. He was not poetic with emotional stimuli and to embellish reality, but describe reality as it is. In reviewing poetry Anwar, there are several approaches appropriate to reveal the intent implicit in the idea, and the mind of the author. One such approach, which specializing in semiotic system of signs. Based on the above, the author examines the poetry Anwar in the form of a study entitled "Human Existence in a collection of poems by Anwar: Study of Semiotics. Human existence can be revealed clearly when analyzed in depth through semiotic studies because this method to probe things are hidden behind signs (icons, indices, and symbols) used in poetry Anwar.

Based on the background of the above problems, it can be formulated at issue, namely, "How can a form of human existence in a collection of poems by Anwar in terms of semiotic studies? Based on the formula above problems, it can be described the purpose of research is to find a form of human existence in a collection of poems by Anwar in terms of semiotic studies.

Jassin (in Adri, 2007: 7) said that poetry is an appreciation of the totality of life that is reflected by its creator with all his personal, his thoughts, his feelings, his will, and others. In the view of Kosasih

(2004: 175) stated that poetry is a kind of essay presentation prioritizes the beauty aspect. The beauty that there is in poetry reflected in the composition of sound and choice of words. Riffaterre (1978: 2) said poetry as a special use of language. This assumption implies that the use of language in literature is different from the use of language in daily life.

Waluyo (1987: 25) said that the definition of poetry is very diverse. Some say that the poems happen compaction of all elements of the power of language, as an expression of thoughts and feelings and imaginative poet, and the language used is connotative. We conclude that poetry is a state of mind, experience and appreciation of the poet by using a series of beautiful words and dense in creating aesthetic effect.

The elements in the builder of a literary work are the elements of intrinsic and extrinsic. Intrinsic element *(intrinsic)* are elements that build literary work itself. Elements is what causes the present literary works as a literary work, the elements which in fact will be found if people read literature. Extrinsic elements *(extrinsic)* are elements which are outside the literary works, but is indirectly affecting the building or system organism literary works (Nurgiyantoro, 2007: 23).

The physical structure (method of poetry) is an aesthetic elements that build the outer structure of the poem. The elements in it can be examined one by one, but a whole. These elements are: diction, imagination, concrete words, figurative language, diversification, and typography.

The inner structure of the poem (the nature of poetry) is the theme, mood, tone and atmosphere, as well as the mandate is included human existence. Expressions contained in the poem is an expression of the depth of expression of the poet as a reflection of the existence and nature of human existence as God's servants in order to enhance human dignity and humanity. Humans are aware of its existence as a personal being, a social being, and religious beings.

The complete human existence has a meaning that stands as himself to get out of yourself. The point is that people realize that he was there. In this sense it is clear that humans can assure themselves that he was there (Sudarsono, 2001: 344). Alwi (1993: 149) said that there are five image of man, that man's relationship with God, man's relationship with nature, man's relationship to society, human relationships with in persons, and man's relationship with himself.

The existence of human is aware of the presence in the world are involved in dialogue, both with ourselves, with our fellow human beings, and with God. The hallmark of human existence is the human relationship with God, a relationship with nature, man's relationship to society, human relations, human aware of its limitations, and human beings are aware of the existence of death.

Semiotics is derived from the Greek word meaning *semeion* mark. Semiotics is a model of literary research by observing the signs (Endraswara, 2008: 64). Figures considered the founder of semiotics are two contemporaries, working independently and in a field that is not the same (not affect each other), which is a linguist Ferdinand de Saussure (1857-1913) and an expert of philosophy that Charles Sanders Peirce (1839-1914) (Jabrohim, 2003: 68).

Semiotics as the science of signs in the view of Preminger cited by Pradopo (2007b: 224) had two aspects, namely

bookmarks *(signifier / significant)* and *signified.* Marker is a formal shape that mark, in the form of units of language sounds or letters in literary writing, while the signified is the meaning of all that which is marked by the marker. Semiotic study of literature is an attempt to analyze the literature as a system of signs and conventions determining what enables had literary sense. The task of semiotic poetry is to make explicit the implicit assumptions that controls the production of meaning in poetry (Pradopo, 2008: 142).

Based on the relationship between signifier and signified, there are three basic types of signs, namely icons, indices, and symbols (Pradopo, 2007a: 121). The icon is that a sign that suggested a link between the marker and the equation is marked natural form. An index is a sign stating a causal relationship. The symbol is a sign that says their relationship is based on conventions of society.

This research is a literature review prepared by using descriptive approach. This type of overall research utilizes descriptive interpretation of the results, which gives attention to the nature of data, the data in relation to the context of the existence of the data itself. Arikunto (in Hawariah, 2004: 39) said that a descriptive study aims to describe systematically and accurately match what about the data.

This research used *descriptive analytic* design appropriate means to describe the object is. In this case, the authors describe the semiotic meanings contained in the poetry of Anwar. The focus of research is to find a form of human existence in a collection of poems by Anwar using semiotic studies. The data in this study is the diction or concrete words that reveal about human existence which an array of poems by Anwar. This research data sourced from Chairil Anwar collection of poems entitled "I Am Beast Bitch", edited by Pamusuk Eneste, published by PT Gramedia Pustaka Utama, December 2007 prints of the nineteenth. This collection of poems consisting of 82 poems, three poems serve as the data selected purposively or as needed. The third poem, namely: "Aku", "Catetan Th. 1946 ", and "Yang Terampas dan Yang Putus". Selection of the three poems is based on the consideration that the poem can express a form of human existence.

Based on the formulation of the problem, it can be argued following studies.

1. Puisi "Aku"

AKU

Kalau sampai waktuku
'Ku mau tak seorang 'kan merayu
Tidak juga kau

Tak perlu sedu sedan itu

Aku ini binatang jalang
Dari kumpulannya terbuang

Biar peluru menembus kulitku
Aku tetap meradang menerjang

Luka dan bisa kubawa berlari
Berlari
Hingga hilang pedih peri

Dan aku akan lebih tidak perduli
Aku mau hidup seribu tahun lagi

Icons in this poem of which is *Aku* and *binatang jalang.* The phrase *Aku* was in the title poem is a poem picture overall. The phrase is the word *Aku* the first person to bring us to the understanding that *Aku* was a form of self-poet himself. It is

characterized by the mention *Aku* repeated: waktu*ku*, '*ku* mau, *aku* ini, menembus kulit*ku*, *aku* tetap meradang, *ku*bawa berlari, *aku* akan lebih tidak perduli, *aku* mau hidup …. Choice of words *Aku* repeated an affirmation about the attitude of the poet indicating keindividualitas high and show firmness poet's personality.

The phrase of *binatang jalang* is an icon. Animals are animate beings are able to move (migrate) and able to react to stimulation. The word *jalang* meant not kept people (of animals); wild. Icons of *binatang jalang* is a form of animal neglect and wild or free. So, Anwar reveals himself as an animal bitch as a sign that he does not want to be tied because they want to live free.

Index in poetry is *Ku mau*, and *peluru*. The selection for word *Ku* would of lines / Ku inevitably seduce a right / *aku* presented that the willingness has strong personality. *Ku mau* presents that a desire or idea of personality that Anwar should be responsible for themselves and do nothing to intervene to his fate, both in joy and sorrow.

Peluru index of the array */biar peluru menembus kulitku/* presenting that as an attack or an obstacle that hit *si Aku*. Despite the many obstacles faced still not cared about. Eagerly *aku* will face all the obstacles *ransom bullet, able and wounds*. *Si Aku* will remain inflamed, crashing, and ignoring the bullets that tore into his skin, he said, */ biar /.*

As for the signs simbolitas poem "Aku" is an element that *kalau sampai waktuku, ku mau tak seorang kan merayu, binatang jalang,* dan *aku mau hidup seribu tahun lagi*. The phrase that *kalau sampai waktuku, ku mau tak seorang kan merayu* it meant my end, *si Aku* expects not the last to mourn or grieve her death because it would be of no use. This implies that the symbol *si Aku* had personality that Anwar should be responsible for themselves. Others should not intervene to his fate, both in joy and sorrow and all the problems is its own affairs *si aku.*

Binatang jalang symbol is an expression of the soul of the lyrics that *si aku* wants freedom from all ties. That's why he was on the herd wasted in the sense that each group there must be a bond, so do not want to follow the rules of bonding and claim that we are herd animals bitch is a courage and honesty.

The phrase *aku mau hidup seribu tahun lagi* is an expression of the spirit of the fiery and tempestuous as it navigates life filled with various problems. Choice of words *aku mau hidup seribu tahun lagi* indicates that despite the many hurdles faced I'll keep working quality so that the mind and spirit can live forever, far exceeds the human lifespan. Rahman (2009: 9) said that Chairil as if he knew that he himself will reap the fruit of its dedication after her death: *"anak-anak sekolah akan berziarah ke kuburku menabur bunga".*

The poem "Aku" is a picture of human existence itself. The poet does not imitate or express the reality of nature, but it reveals the attitude of his soul. What is described above indicate that he has put forward in the poem "Aku" everything is attitude to life that is born of the soul expression of the poet.

The poem "Aku" is an expression of the soul Anwar who experienced many difficulties in her life so that problems arise contemplation of his existence and want liberty from all ties. He assumes that people must be responsible to himself and not to others. With the use of diction *"aku ini binatang jalang"* signifies that this is the

man *si Aku* want to live freely and do not want to be restricted by the rules that bind.

The poem "aku" voiced the spirit of living fiery and full of confidence. That spirit is a form of optimism and confidence entirely on the potential itself. Poetry Anwar is the spirit that must be captured alive is not easy, especially for the poet's full of life's difficulties. Though he was talking about something very sore pain and the pain of neglect, his spirit still feels surge.

The poem "aku" is a reflection of the conscience Anwar. The conscience is related to the fact that human consciousness have. Human consciousness is the human ability to know itself and therefore reflected on her.. Freedom of poetry include existential. People who have the freedom extends as if he has himself. Anwar is free to realize the creative existence, meaning not want to be bound by the rules that bind to and just want to be bound to the truth which he believed. As symbolized in the poem "Aku" in the array poem */ aku ini binatang jalang / dari kumpulannya terbuang/*, for concrete freedom. As for concrete eternal ideals written in the array */aku mau hidup seribu tahun lagi/.*

2. Puisi "Catetan Th. 1946"

CATETAN TH. 1946

Ada tanganku, sekali akan jemu terkulai,
Mainan cahya di air hilang bentuk dalam kabut,
Dan suara yang kucintai 'kan berhenti membelai.
Kupahat batu nisan sendiri dan kupagut.

Kita -- anjing diburu – hanya melihat sebagian dari sandiwara sekarang
Tidak tahu Romeo & Juliet berpeluk di kubur atau di ranjang
Lahir seorang besar dan tenggelam beratus ribu
Keduanya harus dicatet, keduanya dapat tempat.

Dan kita nanti tiada sawan lagi diburu
Jika bedil sudah disimpan, cuman kenangan berdebu;
Kita memburu arti atau diserahkan kepada anak lahir sempat
Karena itu jangan mengerdip, tatap dan penamu asah,
Tulis karena kertas gersang, tenggorokan kering sedikit mau basah!

Icons in this poem of which is *Catetan Th. 1946*, *bedil sudah disimpan,* and *tanganku*. Ungkapan *Catetan Th. 1946* is the form of a note in a book written in 1946. The phrase is a sign indicating the time the Indonesian independence struggle against the Dutch colonialists who want to colonize Indonesia again.

The phrase of *bedil* including icons. Rifle is a form of a tool used in the war. When viewed in the lines of poetry, namely *bedil sudah disimpan* can be interpreted that the guns were never used in war no longer in use and stored well. Hand expression including icons. My hand is a form of the *tanganku* the lyrics. Hand is a member agency of the wrist to the fingertips. So, my hand is the center of activities performed works by the *si aku*.

Index *kupahat batu nisan* of an array /kupahat batu nisan sendiri dan kupagut/ means that the headstone for someone is to make him be remembered that no longer exists in the world. To mengonkretkan response that the si Aku who declared himself ever, ever lived in the world, then si Aku sculpt painted the tombstone itself

and dipagutnya, in the sense of the headstone is placed in the grave as if bitten or cuddled si aku.

Symbols in this poem, the *suara yang kucintai*, *tulislah terus, asahlah pena, ada tanganku, sekali akan jemu terkulai, anjing diburu, and bedil sudah disimpan. suara yang kucintai* expression of an array / And the voice that I love, right stop touching / illustrates that people who have a voice, who is a lover, a wife, a child, or loved ones. The phrase continues to write, Sharpen the pen, it is meaningful to write something to be meaningful or meaningless, that the dive into this life to its fullest. Array This suggests that by being aware of him exist or exist and realize that there is something that other people like him then he will be confronted with many problems of life. More and delved more and more significance is known from the problems of life various aspects of life.

No expression of *ada tanganku, sekali akan jemu terkulai* mean that the powerless and unable to do anything else. *Anjing diburu* expression which means people are equated with dogs (exaggerated its abjection) show haste or 'ignoble'. Word *anjing* means people who are considered low or humiliated or has been without honor.

The phrase has been saved rifle can we interpret the gun is not used anymore because there is no longer a war or activity. This array is a symbol that had human limitations and will have his name oldness. When aging has come and fill the lives of struggle has receded or disappeared, who live just memories are meaningless. Therefore, as a human being aware of the existence itself of the limitations in this life, we should try hard to look for life that has meaning, as in the following lines / hunt meaning/.

Poetry "Catetan Th. 1946 "is a picture of human existence are aware of their limitations. The word "tangan" to declare himself the whole me that Anwar. Hands are the centers of power to work is expressed in this poem was drooping indicates that the si Aku was helpless and has the power any more. Anwar realized that with his hands drooping illustrate that I am aware of the limitations.

Poetry "Catetan Th. 1946" describes the situation during the war where people especially the people of Indonesia is figured as a dog hunted. The man considered the dog means people who are considered low or has been without honor. Everything that is part perisiwa or part of any life. The phrase *kenangan berdebu* and *tangan terkulai* is a symbol that humans need to be aware of his existence will be limitations in this life. Humans need to seek the meaning of life has or means, such as in an array */memburu arti/*. Therefore, before aging and death come ahead, man must fight tirelessly to fill this life. Has human limitations, human seemly aware of themselves and do their best in front of God. Meaning contained in the poem "Catetan Th.1946" so beautiful, namely that man is more sensitive and more aware of its own limitations.

3.Puisi "Yang Terampas dan Yang Putus"

YANG TERAMPAS
DAN YANG PUTUS

Kelam dan angin lalu mempesiang diriku,
Menggigir juga ruang di mana dia yang kuingin,
Malam tambah merasuk, rimba jadi semati tugu

Di Karet, di Karet (daerahku y.a.d.)
sampai juga deru dingin

Aku berbenah dalam kamar, dalam diriku jika kau datang
Dan aku bisa lagi lepaskan kisah baru padamu;
Tapi kini hanya tangan yang bergerak lantang
Tubuhku diam dan sendiri, cerita dan peristiwa berlalu beku

kelam expression is an icon. A shadow is a bit darker, less bright or gloomy. Dark Icons is a form of a rather dark atmosphere, which reveal a gloom.

Di Karet daerahku phrase consisting of words in *di Karet* (*daerahku).* Icons in *di Karet* (*daerahku).*consisting of said *di-* and *Rubber.* The word was a preposition to mark the spot and said *rubber* is a very famous place in the area of Java, where the funeral. Said *daerahku* is a combination of two words, namely the area and *-ku.* The word means the area around the places included in the environment of a city, and the *Ku* meaning of the word *aku* single personal pronoun who spoke or wrote (in a variety of familiar; myself; I. Icons in *Karet (daerahku)* is a picture expected later by the I when died later buried in the *rubber.*

Index in the poem above is *berbenah.* This index provides imagining as if we saw and did a movement that preparations are underway in the room, it was made clear in the array /aku berbenah dalam kamar/. The phrase if you come is it that causes so that someone will be there to see her prepare. It is an attitude of total acceptance of the existence of a slave himself about their fate will be death.

Symbols *yang terampas dan yang putus* on the title of the poem is the description of the poem as a whole. The phrase connotes something that is taken suddenly and there is no hope. The phrase *tubuhku diam dan sendiri* is a symbol of death and physical worldly bestowed on man / His servant.

Poetry "Yang Terampas dan Yang Putus" is a picture of man that realizes the certainty of the coming of death. Anwar realized that human beings should not be afraid of dying and getting ready to face death. Looked in the array */aku berbenah dalam kamar, dalam diriku jika kau datang/.* According to the Jassin (in Eneste, 1995: 22) that Chairil actually had been suffering from lung disease and blood infections are dirty and apparently because his body grew weaker, then the resulting intestinal diseases also bring death.

Anwar humans recognize its existence that death in life and must eventually we will deal with it. Death will meet anyone, without exception. There is no a single soul who is able to avoid it. This is where the poet managed to describe the atmosphere of life and death is existential. Based on the poem *"Yang Terampas dan Yang Putus"* gives us aware of its existence as a human being in this life will be their death.

Based on the research that has been described above, then the result can be briefly discussed below in general. The poem *"Aku"* statements describe myself vigorous and had a strong steadiness of mind. The poem *"Aku"* contains a form of human existence itself. Suprapto (1993: 91) says that Anwar is a vitality that has means a life force, tenacity, and passion ablaze in taking life.

The poem "Catetan 1946" contains a form of human existence that aware of their limitations and their death. The word "*tangan*" to declare himself the whole me that Anwar. The hand that is the center of

power to work is expressed in this poem was drooping indicates that the I was helpless and has the power any more. So, people need to seek the meaning of life memunyai or means, such as in an array / *memburu arti* /.

Poetry *"Yang Terampas dan Yang Putus"* contains a form of human existence are aware of the death. Death will meet anyone, without exception. Looked in the array */aku berbenah dalam kamar, dalam diriku jika kau datang/*. This poem is the justification of God in the verse Q.S. Ali Imran [3]: 185: "Kullu Nafsin Zaaikatul Maut" (Every soul shall taste death). In addition, there are also the signs of Allah in Q.S. An-Nisa [4]: 78, which means "Wherever you are, death will find you, even though you are in a higher solid fortress".

One thing that is very interesting is the general impression of poetry Anwar can not be separated from the reality of his life. His poetry is a reflection of his everyday life, the actual footage from his life experiences, good love, a sense of silence, and death, which is honestly written into poetry.

III. Conclusion and Suggestion

Based on the results of data analysis, this research can be concluded that the semiotic approach (icons, indices, and symbols) was able to find a form of human existence in a collection of poems by Anwar. As a form of human existence in the poem "I" contains the meaning of man's relationship with himself, the poem "Catetan Th. 1946 "implies that man would realize his limitations, and the poem" seized and Yang Disconnect "implies human beings are aware of the existence of death.

Focused on research conclusions above, can put forward the following suggestions. A study of a collection of poems by Anwar only a small area of semiotic discussion, namely human existence and is still limited to three poems. Thus, it is still an area that can be assessed by other researchers, for example, examine this collection of poems in terms of other meanings, such as religious values, social values, aspects of semantics, phonology, morphology, and syntax.

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Analysis Of Characters In The Novel Of Ronggeng Dukuh Paruh By Ahmad Tohari

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ABSTRACT

The purpose of this research is to find descriptions about some figures in Ronggeng Dukuh Paruk novel by Ahmad Tohari. The research using descritive qualitative method with documentations technique, like reading, carefully, writing some significant point and relevant with data source character from Ronggeng Dukuh Paruk novel by Ahmad Tohari. Dialogues and statements will becomes a data for this research. The result of research is Srintil, the main figure, a beautiful orphan, knowing singing, dancing, andkindly, and most of man likes to her. Rasus, an orphan also, he loves Srintil so much. He think Srintil is an incarnation his mother. The add figure is Santayib, he is Srintil's father a merchant of tempe bongkrek and hard worker. Ki Secamenggala, he is an antagonist figure.

Keywords: figure analysis of novel.

INTRODUCTION

The literary work is a work that is not a set of bare facts, but also to show or state the facts that have been processed by the subjectivity of letters. Subjectivity is a representation of a writer on cultural reality and the reality of nature. With the subjectivity, the literary creativity to be useful and not become a 'parrot' for the benefit of dictating outside itself and can make memunyai literary personality in dealing with ideas and language that roam in the middle of society, and it is closely related to his outlook on life.

Literary life filled with creativity. Therefore, the man and his life can be used as a literary object. It shows that all kinds of events that take place in people's lives could be material for a writer or a poet whose creative in his work. For example, environmental influences experienced by a writer can provide inspiration in creating the stories were quite interesting. In addition, the experience of an author who never passes can also provide isnpirasi and an obsession for him. The beauty of a given author makes the story more interesting to read by the reader. One form of literary works created by a person as a form of inspiration herself or other people who can take the form ceritaadalah novel. The novel is a form of a person's life story. The form of his life story in the novel because the figures were very active role manjadikan the novel live as if it is your own life. Mirror's earthly life depicted by the figures in the novel. These figures illustrate the characters have.

This depiction is presented in the form pengimajian cultivate literary authors. As stated by Martha Septia Harnawi in the journal (2013) that in the literature, often found depiction of woman as someone who is gentle, and vice versa man as smart and active. The image of women and men as if rooted mind of the author. Women often described as second class citizens and tersubodinasi. As played by the characters in the novel Ronggeng Dukuh Part (RDP) by Ahmad Tohari.

Issues that will be examined in this RDP novel is the character of the characters in the novel is told this RDP. Ideological figures can be seen with the discussion of the character. The character as intrinsic elements of a literary work is an important element to turn the story Yanga. Can also be said as the heart of a story because it can form a totality behavior. Zaini explained that the characters always portray a certain disposition created by the author. That figure dispositive that encourages conflict between characters (in Sauda, 2001: 7). Faruk (in the journal Septia Martha Harnawi, 2013: 2) said the creation of literary works are always motivated by social reality. Emerging literature often highlights the social problems that exist in society. Literature is seen as a mirror of society because it reveals the fact of humanity.

Based on the above, then this paper will examine or analyze the character figures RDP novel by Ahmad Tohari. Inipum paper aims to find out the character by describing every character figures by Ahmad Tohari RDP.

Etymologically, fiction means something created, something made, something I created, and something that is imagined. Something that is stories portrayed by the author. This is in line with statement saying that fiction came from language fictum Latin meaning "form, organize, create" (Webster's New Collegiate Dictionary in Tarigan1986: 20).

As a literary work that is imaginative, fiction offers a variety of human problems and of humanity, life and living. Author appreciate these issues with the full advantages of kenudian expressed by means of fiction in accordance with his views. Thus, although the story is fiction and reflection with intense awareness. Instead of a mere daydream.

Based on the above, it is concluded that fiction is a story that is created from the power of one's imagination the author through life experiences that happened. Tarin said that the novel comes from the Latin word derived from the word Novellus novies which means "new". In line with the above description, Abrams, (in Nurgiyantoro, 2010: 9) argues that literally, novella means "a new small stuff" and then interpreted as "short story in prose".

As a part in the form of literary prose, the novel is a story that tells the life of just one facet of life. That is, in the novel is not told of life from birth to death because of the problems that exist in the novel the story is limited by the author. So that the events described can give a deep impression to the reader.

In terms of form, the novel is a long story. His words range from thirty-five thousand words to an unlimited number. Another point in a novel is the number of pages more than the short stories. Thus, novel and tells the story freely, more, more detailed, more detail, and more complex.

In general it can be concluded that the novel is a prose that tells the story of the aspects of life that can change the fate of the characters. Elements of literary works there are two elements of intrinsic and extrinsic elements. Intrinsic element is the element that directly build the story of the novel itself, such as, theme, mandate, plot, characters, settings, viewing angle, and style. While extrinsic elements are elements that are outside the literary work itself, such as, ekonomio, politics, religion, culture, and customs.

The theme is the core problem in a story or it can also be said that the central

idea of the story is the basis of a literary work. A good story is certainly memunyai theme. Sasatra story or work of a quality no other literary works on the theme well, that could change the outlook and behavior of the negative into a positive.

Mandate is the message to be conveyed dala author of a literary work. Embodiments of the authors, expression, and author responses to a problem that is of interest to literary works. The literary work has a special message that the author wants to convey to the reader. Messages that can be used as the author to be more active in pursuing life. A special message that is called a mandate.

The character is the nature and character actors who can be known through the depiction conducted author depicts a story. As such characterizations or characters that are reasonable, logical and clearly described will make the reader understand the problems presented by the authors in a story. Characterizations can be known through the character and behavior of leaders who support a story. This behavior can be initiated through the behavior of characters that appear in the stories making it possible for the reader to judge personally represented by these figures.

Background is any information regarding the time, space, and atmosphere were told in a literary work or a novel. Chronology is the arrangement of linked events are reasonable (chronological) and have a causal relationship to become a logical story.

The viewpoint is looking at the way the author of a literary work, can be seen from the strategies, techniques, tactics that are deliberately selected authors to express ideas and stories. Style is the way a person's language to convey ideas using beautiful language media and harmony and to be able to give shades of meaning and something that touches the intellectual power and the reader's emotions.

A character in a literary work can be a person, animal, object, and others are presented in a literary work of fiction or nonfiction. In a work of fiction, there are usually two kinds of characters, namely dynamic character (the main character) and static characters (additional characters). Dynamic figures are figures that have a nature that is always changing from one place to another, from time to time another, and from situation to another. These characters are usually made as closely as possible with the actual reality for human life, which has a complex nature and personality. Prominent figures remained static character does not evolve from the beginning to the end of the story. Static figures are supporting cast in a story that is not experiencing the changes that occur in the environment. Satatis characters do not develop because the author dibatis by space and time.

Mechanical characterization is the way the author depicts or describes perawtakan figure to be recognized by the reader. Nini techniques are of two kinds, namely the analytical characterization techniques (direct) and dramatic characterization techniques (indirect). Mechanical analytical characterization or narrative is how the appearance of characters directly through the description description or explanation by the author. This technique reduces misunderstandings karean straightforward (the nature, character, behavior, physical characteristics). Mechanical characterization dramatic is how the appearance of characters are not langsun. The authors do not explicitly describe the nature and behavior of leaders.

This characterization technique is very effective than analytic because the authors allow leaders to pay attention to the characters through behavior and events.

Based on the formulation of the problem can be expressed following studies. The figures will be discussed in the novel by Ahmad Tohari RDP is Srintil, Rasus, Santayib, and Ki Secamenggala.

1. Character of Srintil

Srintil serve as the main character in this novel is depicted through fisisknya perfect shape. Srintil has a small body, but not a barrier to make it as a dancer ronggeng. White skin, red lips, and a tiny mouth Srintil add beauty as the dancers. Even beauty Srintil likened doll. Characteristics of Srintil good at dancing and singing. The songs are often sung Srintil is ronggeng song, although the meaning of the song sung it has not been understood. Can be seen in the following statement.

> Duduk bersimpuh di tanah sambil meneruskan pekerjaannnya, Srintil berdendang..... Dengan suara kekanak-kanakannya, Srintil mendendangkan lagu kebanggaan para Ronggeng....(Tohari, 1999:9-10)

> "Bagus sekali" kata Rasus setelah melihat bodongan daun nangka itu menghiasi kepala Srintil. "Sungguh?" balas Srintil menyakinkan.
> "Aku tidak bohong. Bukankah begitu Warta? Darsu?"
> "Ya benar. Engkau cantik sekali sekarang," ujar Warta.
> "seperti seorang ronggeng?" tanya Srintil lagi gayanya manja.
> "Betul"
> "Ah, tidak," potong Darsun. "Kecuali engkau mau menari seperti ronggeng.(Tohari, 1999: 11)

Srintil indeed a ronggeng who has been without customs or norms of decency, even religious teachings. Attitude Srintil too freely on letiap leleki. He was willing to sleep with any man. He does not feel uncomfortable or awkward if adjacent to each man. He lived in a society that does not recognize religious teachings, misery and backwardness became his trademark. He did not think his action was good or not, as long as it can support success and have fun.

Srintil also portrayed as a woman who has a love as other women. He could feel how a lost love when Rasus the beloved refuse her to be his wife even Rasus left for good. As the excerpt below:

> "Rasus, kau menghilang dari Dukuh Paruh sejak kejadian malam hari di belakang rumah Kertareja. Jnagkrik! Aku sungguh tak mengerti mengapa kau bertindak demikian(Tohari, 1999: 142)

> "Karena engkau telah menjadi seorang ronggeng. Selamanya aku tak ingin bertemu lagi denganmu kecuali aku memunyai uang."
> "Jadi, begitukah rupanya, Rasus?"
> "Ya,mengapa?"
> "Apakah waktu itu aku juga minta uang kepadamu? Srintil menundukkan kepalanya ketika mengucapkan kata-kata itu (Tohari, 1999: 143)

Srintil has a beautiful face, a fantastic body, good at singing and dancing. Srintil nature are always spoiled cause he liked

and favored citizens. In fact he was a person who was always an idol and flattery, and even fight women. Srintil be used as a tuk event shows the strength of the strength of their husbands. They are happy and excited when their husbands bertayub with a ronggeng. They did not even show his jealousy.

Srintil life after the predicate Ronggeng has changed his life once poor, now wallowing in wealth that is all-sufficient. Srintil be the richest man in Hamlet Part. This causes the robbers targeting his home. Can be seen in an excerpt:

> "Ini rumah ronggeng Srintil, bukan?" bentak salah seorang perampok kepada Sakarya. Yang dibentak menggigil ketekutan (Tohari, 1999: 63)

2. Characteristics of Rasus

Just as Srintil, Rasus also a major figure in the development of the novel. Rasus also orphans as a result of events Bongkrek tempe. Rasus naive country boy who is not educated. He could not know clearly cause disastrous consequences tempe Bongkrek. Rasus irritable and cunning often say slob like a bitch, crickets are all out of the mouth Rasus. Srintil Rasus also often regarded as the incarnation of the mother. Rasus has properties that helpfulness and easily touched by things moving. News looks when finished sing, Rasus eyes looked glazed. When Srintil tells of perkawinananya, Rasus felt pity. Rasus also has a bold and resolute attitude, can be seen when he was offered to become a soldier. When he has been a soldier he had foiled a robbery that occurred in Dukuh Paruk. This phenomenon can be observed in the following excerpt:

> Dalam hati aku mengumpat,bajingan! Ah, kemudaian aku sadar, sebenarnya aku tidak mengutuk Srintil, melainkan diriku sendiri(Tohari, 1999:54)

> "Bangsat engkau Warta!" (Tohari, 1999:97)
> "Jangkrik!" sahutku dalam hati. "Kamu si tua bangka telah menjadi payah dengan cara memperdayakan Srintil(Tohari, 1999:170)

> "Aku maju ke depan. Aku ingin menjadi orang pertama menolong Srintil dari ketakutannya. Kurangkul pundaknya.
> "Kau tidak apa-apa, Srintil?" tanyaku (Tohari, 1999: 74)

> Selesai menembangkan lagu itu Warta menoleh kepadaku. Ia melihat menggigit bibir dan mungkin mataku berkaca-kaca (Tohari, 1999: 99)

> Namun seandainya benar keinginan Srintil memeroleh seorang bayi terdorong ketakutannya menghadapi hari tua, aku tak bisa berbuat lain, kecuali iba. Sangat iba! (Tohari, 1999: 145)

Rasus who loved Srintil very disappointed when the coronation Srintil be ronggeng. She was desperate and abandon their homes and go into the army. Rasus weak nature, grumpy successfully transforms after he became a soldier. Thanks to his upbringing in this army Rasus be firm and strong. Rasus formerly ignorant, backward and poor, has now become a clever (read and write) and

are familiar with religious norms. This is in tune with the following phenomena:

> "Katakan, ya! Kami tentara. Kami memerlukan ketegasan dalam setiap sikap", kata sersan Slamet tegas. Tetapi dari nadanya aku tak menangkap kekerasan.
> "Ya, tawaran itu kuterima!"
> "Bagus. Engkau mulai berbicara seperti seorang tentara" (Tohari, 1999: 149)
> "Aku berbalik. Tak kulupakan aku sudah menjadi tentara. Jadi watak ragu harus kulenyapkan(Tohari, 1999: 173)

3. Characteristics of Santayib

Santayib as additional characters RDP role in this novel are parents Srintil. He has character workhorse as traders tempe Bongkrek. As a person who is not educated Sntayib also frequently issue such obscenities, asu, stump. As a hard worker in the trade he tirelessly at all. He still selling began to dawn, waking morning then selling into the afternoon, as did the night he was still working. That time goes on, that the task they began to dawn to go back to the dawn again.

Santayib shown as an additional character is an old man Srintil pleased with the hard work. He then worked tirelessly day and night. Every day to work without knowing the time in order to support their families. Starting at dawn to the dawn again. He became a merchant tempe Bongkrek in Dukuh village. Selling tempe Bongkrek have to support their families.

Semua penghuni pedukuhan itu telah tidur pulas, kecuali Santayib, ayah Srintil.

> Ia sedang mengakhiri pekerjaan malam itu.... Suami-istri Santayib menyiapkan dagangannya tempe bongkrek. Sebelum matahari terbit, akan datang para tetangga yang akan membeli bonkrek (Tohari, 1999: 26-28).

4. Characteristics of Ki Secamenggala

Ki Secamenggala is an additional character in the novel this RDP. He have the background black life. He was very despised, but he was still revered. He has a depraved character. He was able to possess the body of a Kertareja and do pertayuban with Srintil. Ki Secamenggala is a person who knows no religion. His life is just steeped in sin. Everyone who will be crowned as Ronggeng, he must do pertayuban him. He must serve his offering Ki Secamenggala order to become a Ronggeng can be realized. Can be seen in the following excerpt:

> Hanya Sakarya yang cepat tanggap. Kakek Srintil itu percaya penuh roh Ki Secamenggala telah memasuki tubuh Kertareja dan ingin *bertayub*. Maka, Sakarya cepat berseru, "pukul kembali gendang dan calung, Ki Secamenggala ingin bertayub. Srintil, ayo menari lagi, layani Ki Secamenggala" (Tohari, 1999: 71)

> "He-he. Eyang Secamenggala baru saja hadir. Beliau bertayub bersama Srintil," Ujar Sakarya menerangkan.
> "Eyang Secamenggala?"
> "Benar, Kang. Rohnya memasuki tubuh sampean dan tentu saja sampean tidak sadar. Hal ini berarti persembahan kita pagi ini diterima olehnya. Srintil direstuinya menjadi ronggeng" (Tohari, 1999: 74)

Ki Secamenggala has a depraved character. His life is just steeped in sin. Profanity and obscene characterize life. He became a hated man once revered by the Hamlet Part. Even though Ki Secamenggala was gone, he was still regarded as a spirit who approved the coronation of an ronggeng. A ronggeng before becoming the dancers had to do with Ki Secamenggala pertayuban first. Until the end of his life, he even holds the title as the freebooters, the person who in his life just wallowing in sin, Obscenity and wantonness into his lifestyle.

CONCLUSION

The inference that there are authors describe the figures corresponding to each character. Referring to the main character is Srintil and Rasus, aided by figures such additional, Santayib, and Ki Secamenggala. Characterizations Srintil ronggeng described as dancing girls were pretty and good-natured, but are independent of the man as the image of a ronggeng. Rasus a weak man, but eventually became stronger after he became a soldier. Santayib a figure hard worker. He worked day and night tirelessly. Ki Secamenggala as additional characters are very cunning only steeped in sin.

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Innovation Of Indonesian Language Learning In Improving Learners Competence

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ABSTRACT

Education has an important role in the nation. Without public education will suffer ignorance and poverty, which in turn will make them oppressed and persecuted. Therefore, community educators should be able to realize all the people of Indonesia, which is based on the purpose of National Education that improve human resources faithful, devoted, well-mannered, disciplined, responsible, independent and intelligent. It should be recognized that the task of the teacher is tough. They are not only required to take action to "flesh" in the form of teaching activities, but also must take action "internal", i.e. copying, educate; perpetuate, transmit, and sow the truth values to the students. This is clearly the tasks and mandate of a very heavy when values flourish in the midst of public life has degenerated into civilization irregular dimensions. Through innovative learning activities, classroom atmosphere is not stuck in a state of rigid and monotonous. The students need to be more encouraged to interact, dialogue, and discussion, so that they are able to construct the concepts and principles of science that would be useful to themselves and not by way of governed and lectured. The students should also be taught to dissent so that they become intelligent and critical figure. Of course, democratically, without forgetting the rules of science, the teacher needs to provide scantlings so there is no one concept that would clash with the values of truth itself. Therefore, the need for innovations in learning that can inspire the spirit of children's learning, especially learning the Indonesian language that ultimately the learning process can be managed optimally. Indonesian learning success is characterized by increasing knowledge, skills, positive attitude toward Indonesian, moreover, good behavior towards fellow human beings.

Keywords: innovation, learning, students, competence

Introduction

Teacher jobs should not be underestimated. A teacher is not only required to conduct "physical / corporal" in the form of teaching and learning activities of the class, but also must conduct "psychic / spiritual," that educates; imitate, bequeath, perpetuate, and instill a holy personality to the students.

This is clearly the tasks and mandate that carried the teachers are very heavy when humanitarian values in public life began eroded by the uncontrolled development of civilization.

Therefore, in the development of learning, especially Indonesian lesson for all levels of formal education, the teacher must be a lot of new ground through innovative learning activities, so that the classroom atmosphere impulse is not stuck in an atmosphere of rigid, monotonous or even uncontrollable.

The students need more invited to dialogue, discuss, and interact, and engage in dialogue so that they are able to make frame the concepts and rules of science that they use, not by fed continuously to the students there that school considers it a prison.

As a teacher should familiarize students to dissent that figure born intelligent, responsible, and critical. Of course, with democratic means, courteous without identity stripped scientific rules, the teacher needs to provide reinforcements so that the concept would be at odds with the values of truth can be controlled.

Teacher or educator in Chapter I Article 1 Paragraph 6 of Law No. 20 of 2003 on National Education System states that "Teachers are educators who qualified as teachers, counselors, tutors, lecturers, tutors, instructors, facilitators, and other designations in accordance with their specialization, as well as participating in education." Furthermore, in Chapter XI, Article 39, paragraph 2, states that: "Teachers are professionals in charge of planning and implementing the learning, assessing learning outcomes, coaching and training, and conduct research and dedication to the community, especially for educators in higher education".

Globalization has spawned competition in various fields, including in the field of education. Improving the quality of human resources should be a concern. At present it can be seen that the quality of our education is low. Learning achievements of students according to the World Bank, in its journey, Indonesia to rank low in international standardized tests of student achievement, even after taking into account the socio-economic conditions. In 2003, Indonesia got the position 33 of the 45 countries in the Third International Mathematics Science Study (TIMSS). In the 2006 Program for International Student Assessment (PISA), which assesses how well the readiness of students aged 15 years in the face of life, Indonesia was ranked 50 out of 57 countries in science, reading and mathematics.

Hence the need for innovations in learning that can inspire the spirit of learning of the students, especially the Indonesian language learning in the learning process can ultimately succeed to the fullest. Indonesian learning success is characterized by increasing knowledge, skills, and positive attitudes towards Indonesian. This shows that the backwardness of Indonesia is certainly determined by the attitudes of teachers in the process of teaching materials. There is no option for teachers but had to force myself learning innovation on a large scale.

A teacher should never stop learning in bringing students into a dignified human being. Teachers should not assume that what they pursue during this time as if it had more than enough and does not need a new innovation. In fact, we can see that development of technology is so rapid that requires all educators improve the quality and learning outcomes, more so after entering the modern age.

DISCUSSION

1. Language Learning

According Mulyasa (2004: 100) learning is essentially a process of interaction between the learners and the environment, resulting in a change of behavior towards the better. In the interaction of many factors that influence it. There are two factors, namely internal and external factors. Internal factors are factors that come from within the individual. The external factor is a factor that comes from the environment. The main task of the teacher is able to condition the environment to support behavioral change learners.

Understanding learning according Hamalik in his Curriculum and Learning (2001: 57) is composed of a combination of elements include human, material, facilities, equipment, and procedures that influence each other to achieve the learning objectives. Material elements include; books, blackboards, chalk, photography, slides, films, audio, and radio tape. The facilities and supplies consist of classrooms, audio visual equipment, also computer (multimedia). Elements include procedures; schedules, delivery methods of information, practice, study, exams, and so forth.

This is in accordance with the mandate of the Ministry of National Education regulation number 22 of 2006 on the content standards. Indonesian subjects that are part of the contents of the regulation has the following objectives:

"Learning Indonesian directed to improve the ability of learners to communicate in Indonesian well and correctly, both orally and in writing, as well as develop an appreciation of the work of human literary Indonesia. Competency standards subjects Indonesian is minimal ability qualification learners that illustrate mastery of the knowledge, skills, and positive attitudes towards language and literature Indonesia. The competency standards are the foundation for students to understand and respond to the situation of local, regional, national, and global ".

Indonesian teaches different from non-linguistic competence. The difference is that non-linguistic tendency for teaching students have not mastered the material. Instead teach Indonesian facing learners who already can speak Indonesian. Commonly heard saying "what the benefits of learning Indonesian?" full of questions innuendo this will cause poor students would not even excited at all to learn Indonesian.

Therefore, an educator should understand the purpose of learning Indonesian, which help learners develop the ability to communicate, both orally and in writing (Purwo, 1997: 13). The ability to communicate is fundamental is the ability to grasp the meaning and message, including interpreting and assessing, as well as the ability to express themselves with the language.

Learning and teaching is an activity related to each other. Learning can mean the activity of students. While teaching is devoted to the activity of teachers (Siahaan, 1987: 2). So the learning process is a learning process of students interact with teachers teaching activities. The learning activities not just the activities transferring knowledge on students. Portege is not an object but a subject. Learning process should be directed to the optimal interaction between teachers and students. Students are not only recipients of information but also information seekers to be delivered to the other party. Learners are expected to sharpen the sensitivity of feeling and improve the ability to think and reason. The intended target was not taught something so that what is taught it can be tested objectively. Learners are not only equipped with the ability to understand and use sentences as to understand and use language in various contexts of communication.

This can be seen in the process of interactive learning activities that are intended to deliver students achieve goals that have been planned in advance. Meanwhile, according to Mulyasa (2004: 101) the learning process is successful and if all the qualified students are actively involved, both mentally, physically and

socially in the learning process. In addition the students showed enthusiasm high learning, the spirit of great learning, and confidence in yourself. In terms of results, the learning process is successful in case of positive behavioral change in self-learners entirely. The learning process is successful and produces uneven quality output when inputs are numerous and high quality, and according to the needs, the development of society and development.

2. The Role of Indonesian Language Teachers

Education is essentially a process of self-reliance development of learners in accordance with the development and growth of the physical, psychological, and emotions in an environment of interaction with adults (Rudini, 1994: 1). Reality on the ground instead of independence produced but rather students who have graduated in the education unit does not generate jobs. Graduates of the educational unit actually find employment even very ironic begging for a job.

Learning Indonesian is one material that is taught in schools from kindergarten-PT. The purpose of learning can we review from two points of view, for the students intended to allow the students were able to appreciate the Indonesian language and literature as well as having the ability is good and right in the language. While the goal for teachers is to develop the potential of the students in the Indonesian language, and can be independently set up and define teaching materials based on the ability of their students and the environmental conditions in which they are located.

Learning conditions in schools are currently experiencing "malnutrition" which is characterized by not knowing what to learn what, do not like to study, do not want to learn, do not have adequate learning outcomes, and cannot use the learning outcomes they get. School environment and teaching are not able to bring students into the learning environment with highly motivated so as to create learning conditions were really helpful (meaningful learning). Learning activities has become a burden for the students so that they are trying to stay away or find a shortcut by cheating or other ways that are not true.

As for learning Indonesian in school is expected to help the students to get to know themselves, their culture, the culture of others, learning to express ideas, as well as being able to use imaginative and analytical capabilities contained in each self-protégé.

While the Minister of National Education regulation number 22 of 2006 on content standards, lists some competency standards subjects Indonesian. Including competency standards subjects Indonesian aims as follows.

1) Students can develop their potential in accordance with the capabilities, needs, and interests, and to foster an appreciation of the work of the literary and intellectual outcome of the nation itself;
2) The teacher can focus on competence development language learners by providing a variety of language activities and learning resources;
3) Teachers more independence and flexibility in determining the linguistic and literary teaching materials in accordance with the conditions of the school environment and the ability of their students;

4) Parents and the community can be actively involved in the implementation program and literary language in schools;
5) The school can develop educational programs about the language and literature appropriate to the circumstances of learners and learning resources are available;
6) Areas can specify materials and learning resources of language and literature in accordance with the conditions and peculiarities of the area by taking into account national interests.

Moreover, being the common goal of learning a language which is its important role in the intellectual and emotional development of students as well as supporting the success in learning all subjects. In addition, learning Indonesian can also allow humans to communicate with each other and share their experiences and learn from each other to improve intellectual abilities.

3. Innovation and Model of Indonesian Language Learning

According to Roger innovation is an idea, object objects or activities that are considered new. For Drucker innovation is changing, or ideas that drive a person as its work and work and better than before or generate new performance dimension. Innovation occurs in parallel with the emergence of a challenge, because every innovation leads people to be in different situations and require adjustment (in Prawiradilaga, 2012. Page 212).

Along with improving the quality of education, innovation education, especially learning innovation is done in order to create innovative learning program. Innovative learning program designed to be an interesting activity that learning atmosphere in the classroom is not boring. Creativity and innovation can also cheerful learning situations. As educators, we need to know and be able to apply innovations in order to develop a conducive learning process so as to obtain maximum results. et, Bruner and Ausubel.

Teachers who have innovative capabilities and high creativity in a variety of ways to teach Indonesian, usually there are two models to explain something to the students, to train something to the students, and engage students in a speaking activity. (Purwo, 1997: 19) This learning model has various implications for students.

Learning with the first model, the teacher explains something to the students will cause students to forget. Potential for sure will happen because the teacher does not provide a learning experience to their students. Learning with the second model, which trains teachers to students demanding something students working diligently repeating the teaching materials to many times. If protégé after being given exercise many times still could not, the teacher continues to train the same material. The expected results will indeed seems good but the impact the activities that many times is certainly boring for the students.

Giving students the opportunity to pour his ideas in language activities will be an opportunity to master the teaching materials are provided. Teachers are just as facilitator pacer or build a spirit of students. Educate the child actively carry out the activity.

As for the aspects of the language skills that include some of them such as speaking, listening, writing and reading are related to a wide variety of literature and

language which is the scope of the standard of competence learning Indonesian.

Basically, the learning process was successful or not is determined by the innovation and creativity of teachers in performing their role. Teachers are not fixated on material prepared but ready to adjust to the interest of the needs of students and class circumstances. With the third model of learning that is deemed more successful and meaningful learning for students in developing all the ability in him. This model is known as the communicative approach.

Model teachers are teaching subjects, such as presenting a concept by showing a video or read or show how to connect a verb. Centered learning, learner activities involving students in active learning and fun as discussing the advantages and disadvantages of a topic, conduct Internet searches, reading a newspaper article, develop a real story in the form of development of imagination.

4. Conclusion

The times indicated that the teacher should be able to be dynamic and simultaneously innovator (innovator) in the field of education. From the description above, teachers can review it and apply in the teaching and learning in the classroom so was born the new innovations.

With multi role of teachers, both as educators, teachers, developers (materials, media, methods) and as an appraiser result of learning or the learning program then sued various abilities and skills in performing a task, for educational success is largely determined by the expertise of the teacher's performance as practitioners working in the field of education.

Therefore, teachers should be able to build effective communication between parents, students and teachers. Building the golden triangle of communication will give birth to a form of learning that will strengthen the confidence and the ability to establish a harmonious relationship.

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Politeness In Enhancing Innovation In Learning Indonesian Language

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ABSTRACT

Learning in the classroom is one of the events said to be observed. The said event involves the active participation of teachers and students to interact. A teacher is expected to convey an idea of his brief, clear, complete and correct, as well as organized, while the students are expected to be able to communicate well in response to what was presented by the teacher. Language is a means of communication between people in public life in the form of said sound generated by the human vocal organs. Language in its function as a communications tool presence is very important in society. Communication through language everyone can adjust to the physical and social environment as well as to study the habits, culture, customs, and the background of each. Polite language is a form of individual behavior in using the language, especially when communicating. The realization of individual behavior is different in using the language. There are individuals speaking politely, but there are also people speak with no manners. Problems politeness in learning can be avoided if teachers and students to use polite language. Correspondingly, there are a number of linguistic politeness principle that needs to be used as a reference. For the problem of politeness can solved when teachers and students to apply the principles of politeness. In lessons, politeness is a form of behavior of teachers and students in using the language when communicating.

Keywords: manners, communication, language, culture

BACKGROUND

The persistence of a speech act is determined by the ability of speakers in certain situations said. In reaching the effectiveness of learning, teachers and students can develop patterns of communication by speech acts. Therefore, the speaker and the hearer need to observe the principles of politeness in speaking for politeness principle likely to lead to the maintenance efforts of social and personal relationships in the communication process.

This means that teachers and students is a key determinant of polite use of language or language that is not polite in learning. As a tribute, both teachers and students always speak politely in learning. Politely speaking, a positive impact on the learning success will be achieved. It is proved that both teachers and students are able to communicate with courtesy. Due to the use of language is not polite in learning needs to be avoided. Polite language use can have a negative impact on the success of learning.

School serves as the official implementation of learning. Many elements are involved in supporting the goal. In language learning in schools is a very important communication tool. The use of language to socialize not be separated from the determinants of acts of communication as well as the principles of modesty and realized in acts of communication. In the assessment of politeness at least two things to note is how

we speak and with whom we speak. Essentially politeness is our ethics in socializing in society with the use of language and choice of words are good, with notice where, when, to whom, with what purpose we speak politely. This is in line with the opinion of Wijana (1996: 11), that forms of speech uttered by the speaker is motivated by the intent and purpose. In this connection forms of speech are manifold can be used to express the same intent. Or conversely, a wide variety of purposes can be expressed with the same speech.

For example, we often hear the words spoken teacher is less appropriate when dealing with children who cannot do the task in front of the class; said posed such, you are stupid. Teachers should use a more polite word choice, for example, if you learn could definitely do well. Moreover, supported by the arrogant nature of excessive teacher, will usually cause the students to experience high levels of stress and the edges are no longer willing to go to school.

DISCUSSION

1. The Function of Learning Politeness

Learning is a modification or reinforce behavior through experience (Hamalik, 2009: 27). According to the understanding, learning is a process, an activity, and not a result or goal. The results of learning rather than a mastery of the results of exercise but behavior modifier. The purpose of learning the same principle, namely changes in behavior. Just different ways or business accomplishments and emphasize the interaction between the individual and his environment. In the interaction of a series of learning experiences. From some of the study it can be concluded that learning is a process of changing a person's behavior relatively sedentary including changes in skills, habits, attitudes, knowledge, and understanding thanks to the experience that is the interaction between the individual with the environment.

Teachers need to provide a variety of learning situations appropriate to the material presented and teachers need to adjust to the capabilities and characteristics of students. This is in line with the opinion of Lindgren in Soekamto (1997: 5), which states that the focus of the education system includes three aspects, namely: (1) students, the most important because without the students are not there will be a learning process, (2) learning that is what internalized students when they learn, not what should be done lecturers to teach, but what will the students to learn, and (3) learning situation, ie environment where the learning process that includes all the factors that affect students or process of learning as teachers, classes and interaction in it, and so forth.

KBBI (1990: 781) gives the sense that manners means: smooth and good (cultivated, behavior); polite; patient; and quiet. Politeness, in a broader context, does not refer to mere politeness but also refers to nonverbal aspects such as behavior, facial expression, and tone of voice. In this case Lakoff (1975) defines civility as a treatment that reduces friction in an interaction. This means politeness aim to avoid conflicts. In the context of politeness, Omar (2000) relate to the use of everyday language that does not cause outrage, anger and resentment on the part of the listener. Such situation will create an atmosphere of harmony relationship between speaker and hearer.

Parents are always advised their children to speak polite to anyone, let

alone with the father of the teachers, parents, and older people, as well as to his friends. The counsel intends that spoken utterances do not cause undesirable effects to the hearer let alone the teacher as a partner he said. Speech someone could result in a pleasant atmosphere and vice versa speech can lead to disaster. We must be able to adapt with whom we speak, when we speak, when we should speak, and how we speak. In KBBI, speech is speech; said; words; while the speech is speech; speech; stories, etc.; and the narrative is: the process, the act, and the way said. (KBBI, 1990: 978).

Another example, when students are asked to discuss a problem, there are students who have an attitude of always trying to dominate the conversation, so that the other students have almost no chance to argue. Students like it to have an attitude that is less mannered, although he said the contents of the target. There are other examples during the lesson, the teacher was explaining the matter seriously. Suddenly a student is talking to a friend next to him. There are also students who do not heed the lesson by looking the other way and style underestimate the teachers who are teaching, cynical chuckle or a partial way that does not maintain an atmosphere conducive communication, peaceful, and awkward, which can be disturbing communication purposes. That all are examples of speech or the attitudes of the students were less polite.

Speech we use will determine whether to give rise to understanding and good sense, or even lead to conflict. Therefore speech in which someone can describe our personality, who we are, our origins, our sociocultural, our education and many things related to us, whether good or not. A similar word meaning politely is polite, even those two words are merged into a compound word manners. Yule (in Dawn, 1996: 104) says that modesty as a concept that is decisive, as the idea of 'polite social behavior', or etiquette, there is in the culture. Manners also determine the general principles, including the nature of thoughtful, generous, humble, and sympathetic towards others.

Keraf (2006: 114) says that manners are intended to reward or honor of the person to talk to, especially the listener or reader. Respect here does not give awards or create enjoyment through words, or use sweet words that correspond to the social niceties of civilized society. It is not that! Respect and style to be manifested through clarity and brevity. It shows that clearly convey something meaningful not make hearer to sweat to find out what is written or said speaker.

Brevity can be achieved through efforts to use words efficiently. It shows that the teachers in the learning process speech delivered to students not convoluted and lengthy, so it would be distracting students and will complicate the students in grasping the lesson.

Civility, politeness, or ethics are procedures, customs, or traditions prevailing in the society. Politeness is the rules of conduct established and agreed upon by a given society so that politeness as well as a prerequisite agreed by social behavior. Hence, modesty is commonly called "manners". Politeness can be divided into three, namely dress modesty, politeness do, and civility narrate. Except dress, politeness last two are not easily broken down because there is no standard norms that can be used for both types of politeness that. In politeness dress (dress, dress), dressed polite at school avoid clothing that can stimulate friends,

especially the opposite sex, such as see-through clothing, exposing part of the body that are generally closed, and miniskirts that are too high or too split. Politeness works is the procedure acts or gestures when facing something or in certain situations, for example, into the classroom do with running; when in class there are guests who want to meet with a teacher or a student, we do not chat with friends; sitting in a classroom polite leg positions; facing the people we respect that teachers in the classroom.

c. Politeness formation Speak

As mentioned earlier, that politeness civility or politeness describe speakers. Politeness according to Leech, in Wijana (1996: 56-61), states: that in fact in speaking must pay attention to the six principles of decency, namely: (1) maxim of wisdom, this maxim outlines each speaker to minimize harm to others, or to maximize benefit for others; (2) The reception maxim, this maxim speech act requires each participant to maximize harm to self, and minimizes self-serving; (3) The maxim of mercy, this maxim requires each speaker to maximize respect for others, and to minimize the disrespect to others; (4) maxim humility, this maxim requires each speaker to maximize dishonor on yourself and minimize the sense of self-respect; (5) maxim match, this maxim outlines each speaker and hearer to maximize compatibility between them and minimize the mismatch between them, and (6) maxim of sympathy, this maxim requires each participant substitutions to maximize the sympathy and minimize the sense of anticipation to partners said.

Here is an example which shows that the A following the principle of modesty by maximizing their repetitive praise to his friend who got the most good, but Person B does not follow the principle of modesty because most clever maximize flavor and taste great on yourself. A: Tono, Congratulations, you are the most good replay value! B: Oh, I deserved the best grades. Avoiding the use of taboo words. Taboo utterances sometimes still used by the students to the teacher. Speech that smelled of sex, which refers to the speech organs are commonly covered in clothes, words that refer to anything that is disgusting, and the words "dirty" and "rough" including taboo words used in speaking in class.

The following example is the use of speech utterances taboo as it was uttered by students to teachers when learning is ongoing. (1) Sir, please permit out for a while, I want to defecate! Example sentences students classified as taboo above will be.

CONCLUSION

At the end of this article can put forward some of the following:

a. Communication is very fundamental in conveying the message. The message will be accepted effective when content and ways of delivery well done. To be able to convey the message properly, needs to be done politely.
b. The learning process performed by the teacher must be based on the rules and procedures for the delivery of a polite, good content, language, how to deliver, as well as mime and movement.
c. Students attend classes in order to maintain good posture and good-mannered speech to fellow friends, and teachers.
d. The key to success in learning is understanding between teachers and students in the transaction by using the learning attitude and polite speech.

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Developing Civics Learning Devices Using Guided Inquiry to Train Students' Critical Thinking Skills

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ABSTRACT

This study aimed at producing a valid, practical, and effective Civics learning device with guided inquiry model to train the students' critical thinking skills. The development of learning device used Dick and Carey model and was tested in the classroom using One-Group Pretest-Posttest Design. The data were collected through observation, test, and questionnaire. The data analyses were through descriptive quantitative, qualitative, and t-test. From the findings in trial classroom, it was found a valid, practical, and effective learning device. It was valid because the average score given by civics learning expert was more than 4 in the interval 1-5, and achievement test showed that it was valid, reliable, and sensitive. It was practical because the teachers' ability in managing the classroom showed good and very good category, and the students activities were categorized as effective. The learning device was effective because the students' response was positive, students' achievement test was thorough, and the students' thinking skill was increased. Results of the effectiveness of the learning device oriented guided inquiry method can be seen from the teacher's ability to manage learning very well, students' learning activity was effective, students' response was positive, learning mastery was classically achieved namely 93.33%, and students' critical thinking ability increased. Based on the results of data analysis, it can be concluded that Civics learning device Oriented Guided Inquiry Method developed is feasible and can train students' critical thinking skills in learning.

Keywords: Civics Learning Device, Guided Inquiry, Critical Thinking Skills

Introduction

The 21st Century is a global century. Social life is changing rapidly due to increasingly integrated world especially supported by advances in information and communication technologies so that the boundaries of society and the state become blurred. The consumers demand high quality of production and continuously improved, so that the professionalism is an absolute requirement in the global life, including teacher professionalism. Professional teachers must have a variety of competency, among others, are able to produce human resources who have the expertise, skills and professions that suit the needs and also suitable with the characteristics and personal aspirations of each student.

Today the problem of education is one aspect of life that gets a lot of attention from the public. Education is not just the media to convey the culture and pass on from generation to generation, but the changes that can develop creativity in the education world. Education is also a strong and authoritative social institution to empower all developed society into qualified humans to be capable and

proactive in facing the challenges of the times, which are always changing.

Demand for creating reliable and competitive Human Resources (HR) in this globalization era is a challenge that must be faced by the national education. Efforts to create the human resources can be taken through various aspects of education. However, it cannot be denied that the learning process is the most decisive aspect. Through the quality learning process, it is expected that quality human resources can also be raised. Therefore, effort to improve the quality of learning becomes an absolute thing that must be realized in any learning organization in every level and type of education.

Improving the quality of education through the learning process should be able to fulfill the functions and objectives of national education as stated in article 3 of the 2003 Education Law:

National Education serves to develop the ability and character, and civilization of the nation's dignity in the context of educating the nations is aimed at developing students' potentials to become a man of faith and devoted to God Almighty, noble, healthy, knowledgeable, skilled, creative, independent and become democratic and accountable citizens.

This formulation provides a clear direction for the provision of education in general and the implementation of learning in particular. That any organized learning as an attempt to create human resources that meets the demands of the above-mentioned law is a must. Thus, the outputs of education that are reliable, competitive and still have a national character is not merely dreaming but actually can be realized in the life of the nation.

Effort to improve the quality of learning done in the classroom becomes an indicator for the success of the education institution and indirectly it will affect in improving the quality of national education. If the quality of learning that takes place in each class qualified, then it can be ensured that the output generated by the institution concerned is also qualified. Conversely, if the learning that takes place in each class is not qualified, then the expectation of quality output was was only a dreaming. Therefore, in the national education, various studies, trials, training and so on are continually developed as an effort to improve the quality of learning. Various approaches, models, strategies, teaching methods and techniques continue to be developed, implemented, and experimented in order to address issues that arise in learning.

Based on the results of research conducted, Soemantri in Soemantri (2001; 289) states that in the learning of Civics education, there is a tendency of teachers to use traditional teaching techniques such as; ground covering technique, drill master, indoctrination, and narrative technique. In fact, learning as proposed by Soemantri mentioned above does not occur only in the learning process in schools such as the results of research. Thinking skills of students is very important for their future. Some experts in the field of learning reveal a similar expression, namely in accordance with the opinion of Gedgrave (2009) that the process of gaining knowledge is more important than the product. For a

particular Civics learning material, which aims to foster critical thinking skills of students in the classroom, teachers can use the approach to make students more active and use the thinking skills of every learning activities in the classroom. In other words, a learning strategy used is able to seek in order that teacher-centered learning turn out to be student-centered or student active learning. The role of teachers is only as a facilitator.

Learning device development should be done by teachers before implementing the learning process. The development of learning devices are expected to help teachers to package and present more qualified and varied learning materials.

Along with the development of science and technology, lot of learning materials can be developed to support the achievement of learning objectives as learning innovation. The learning development relies on learning indicators, teaching and learning strategies that will be used, and the subject to be used in order to attract students' interest towards learning. Development of learning tools in which there are strategies or models should increase the ability of thinking.

Critical thinking is correct thinking in the search for relevant and reliable knowledge about the real world (Schafersman, 1991 and Chaffee (in Johnson, 2002, p.187)). The most important thing in teaching critical thinking is to create a spirit of critical thinking, which encourages students to question what they hear and examine their own mind to ensure there is no inconsistent or erroneous logic (Ibrahim and Nur, 2000).

Reality happens in the field until now is that the students' critical thinking skills are not yet taught and are still not measured or tested. From interview with teachers at SMAN 4 Polewali in MGMP event, it is found that if students are given test examples while learning, they were able to accomplish, but if the teacher gives daily tests that contain aspects of critical thinking, students have difficulty in answering the questions. Learning that does not emphasizes on the development of higher level thinking skills (critical thinking skills) tends to put students into memorizing (rote learning). It is very easy for students to forget the material that has been studied before, because the students do not gain experience in developing critical thinking skills. In the view of Slavin (1997), a student must manage his own knowledge by utilizing the brain to think. Learning tools that make students become active can help this process by providing phenomena and questions that exercise critical thinking skills, by learning, designing information to be more meaningful and relevant to the needs of students. It can be done by providing opportunities for students to find or apply their own ideas, and to invite them to be aware and consciously use their reasoning and systematic thinking ability to learn.

One of the alternatives that can make students more active in learning activities as well as pay attention to fun atmosphere and closely related to the development of students thinking skills of SMA Neg. 4 Polewali is by using guided Inquiry approach, or Guided Inquiry learning. Guided Inquiry also can help teachers link between the Civics materials with learners

real-world situations, and encourage students to make connections between knowledge possessed and the application in their daily lives, both as members of the family and society. Through this concept, the learning outcomes are expected to be more attractive to learners, and can enhance students' thinking skills well.

Noting the objectives contained by Civics Education, learning in school should become favored, challenging, and meaningful activity to learners. Teaching and learning activities implies the interaction of various components, such as teachers, students, teaching materials and other means. To anticipate this, the development of appropriate learning tools should be supported. The use of learning devices oriented to Guided Inquiry is expected to help improve students' critical thinking skills as well as the delivery of messages and content at the time, and also will give a real mastery of concepts realistically.

The development of learning tools is a necessity in natural science subjects that responds positively to the developments of information, science and technology and the demands of decentralization. This is done to increase the relevance of Natural science learning programs with local state and requirements.

By developing learning tools with guided Inquiry-oriented, it can foster better thinking skills so that information obtained through the lesson can cause changes in a positive value on students.

Based on the explanation above, the researchers will develop learning tools oriented Guided Inquiry (including lesson plans, students book, worksheets and Assessment Sheet) to train the students' thinking skills, by submitting the title "Developing Civics Learning Devices using Guided Inquiry to train Students' Critical Thinking Skills".

Research Methodology

This research employed pre-experimental design. Before doing the research, the learning devices that will be used are developed. The research subject was the tenth grade students of SMA Neg. 4 Polewali in odd semester academic year 2015/2016 consisting of 30 students.

This research used One Group Pretest-Posttest Design (Tuckman, 1978) that can be presented as follows:

O1 X O2

Notes:

O1 = Pretest to find out the students mastery on the learning materials before given learning tools with Guided Inquiry models

X = treatment by learning tools with Guided Inquiry models using worksheet which is oriented to critical thinking skills

O2 = posttest to find out the learning outcomes and the students mastery on learning materials after given learning tools with Guided Inquiry models.

This study consisted of two phases. The preparation phase is the development and the implementation of learning tools in the classroom. Research procedure is using the design of Dick & Carey learning device development model followed by testing devices in the classroom.

This model starts by identifying general learning goals. Before formulating specific

objectives, it needs to analyze the learning and identify students' early behavior. After formulating specific objectives, the next is formulating reference test that is the test to measure the ability of the specific objectives. To achieve specific objectives, then a learning strategy is developed, that is, the scenario of learning that is expected to achieve the objectives optimally. Then, learning device that is suitable with the objectives are developed. The final step of the design is to perform the evaluation, namely formative and summative evaluation. Formative evaluation is used to assess the program, and summative evaluation serves to determine the position of each student in the mastery of the learning materials. Based on the results of this evaluation is then performed feedback in revising learning programs. Dick and Carey' learning model is stated on the following figure.

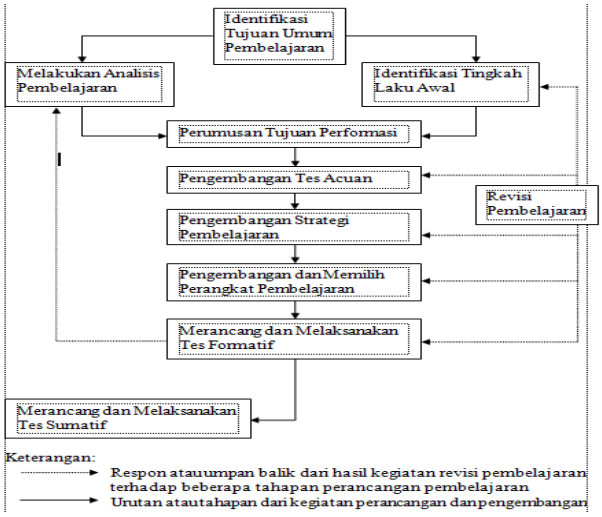

Figure 1. Diagram of Dick and Carey Device Development model (Dick & Carey, 1990)

This study uses multiple data collection techniques; they are:

1. Observation

Observation is used to obtain research data about the enforceability of the lesson plan, student activities, and barriers when teaching and learning takes place.

2. Tests

Test is used to obtain research data on the students' learning outcomes and critical thinking skills. Test is performed as pretest, and after three sessions of learning (posttest). The tests were given for 2-hour lesson (90 minutes).

3. Questionnaire

The questionnaire is used to elicit student responses and to determine the students' response toward guided inquiry learning models using students' worksheet oriented critical thinking skills.

The instruments of the research consist of:

1. *Observation Sheet*

a. Observation sheet of the implementation of lesson plan

It is in the form of table with column of observed aspect, implementation, and evaluation. Observed aspect in learning consists of introduction, main activity, closing, classroom atmosphere, and time

allocation for each meeting. Implementation consists of two aspects, yes and no. Evaluation consists of very good, good, fairly good, less good, and not good. It aims at evaluating the quality of lesson plan implementation done by teachers during teaching and learning process.

b. Observation sheet of Students' Activities

It is used to analyze the student engagement in learning process by looking at the percentage of activities undertaken by students during teaching and learning process divided by the overall activities designed, and multiplied by 100%. Students' activities observed are attention, response, hearing teachers/friends' explanation, material reading, worksheet, problem formulation, hypothesis formulation, designing and conducting observation, recording and analyzing the results of observation, presentation, discussion, making inferences, asking the teacher or friend, and behaviors that are not relevant to the teaching and learning process.

Both of observation instruments above were held by two observers, so that the reliability needs to be calculated. Calculation of instrument reliability is done with a technique proposed by Borich (1994), namely inter-observer agreement. According to this technique, two observers use the same instrument to observe the same variables, then the observation results are calculated using the formula percentage of agreement as follows:

$$R = \left[1 - \frac{A-B}{A+B}\right] \times 100\%$$

Notes:

R = Reliability coefficient

A = Frequency of observed behavior by giving high frequency

B = Frequency of observed behavior by giving low frequency

Observation instrument is categorized as good if reliability coefficient gained is > 75%.

2. Students' Learning Outcomes

a. Achievement test

Achievement test consists of questions addressed to the students in the form of written test. It aims to measure the students' ability in mastering the materials taught and made based on test blueprint based on the learning goals that will be achieved. It is in the form of multiple choice and essay tests. Multiple choice used consists of 5 options, and essay test is used because it can record students thinking process that shows critical thinking skill. Achievement test used should have good sensitivity index. Sensitivity index of an item is the measurement of how well the item distinguishes between the students who have learned and not. Calculating sensitivity of item of multiple choice can be done by using the following formulation (Gronlund, 1982):

$$Sensitivity = \frac{Ra-Rb}{T}$$

Notes:

Ra = the number of students who answer correctly in posttest

Rb = the number of students who answer correctly in pretest

T = the number of students

To find out sensitivity index of essay test, the following formulation is applied:

$$Sensitivity = \frac{\sum U12 - \Sigma U21}{N(\max score - \min score)}$$

Note:

ΣU21= Sum of pretest score.

ΣU12= Sum of posttest score.

Max score = Maximal score achieved for every item.

Min score = Minimal score achieved for every item

N = number of students

According to Gronlund (1982), item said to be sensitive if the sensitivity of the items was 0.30 up to 1.00. A greater positive value indicates that the sensitivity of items to the effects of learning also getting bigger (Arikunto, 2010). The completeness of student learning outcomes determined from: indicator completeness, individual and classical completeness. An indicator is said to be complete when ≥ 75% of students achieve the indicator. Minimal completeness criteria of Civics subject at Class X SMAN 4 Polewali are 70 or converted by > 2.80. Classical learning is said to be complete when ≥ 75% of individuals are completed.

b. Skill evaluation sheet

It consists of assessed aspects including formulating problems, hypothesis, designing trial procedure, and observing, analyzing and concluding data, communicating the findings that consists of concept mastery and presenting. Evaluation of skill competence achievement is done by to the students to assess to what extent the competence achievement particularly in the dimension of skill.

c. Attitude assessment sheet

It is used to evaluate students' character realized in behavior as the part of learning. Students' character includes spiritual competence (KI-1) associated with the building of faithful students, social attitude (KI-2) consisting of discipline and curiosity. Attitude evaluation comes from observation and self-evaluation with checklist and evaluation scale with rubric.

3. Test of Critical thinking skill

The instrument consists of questions addressed to the students in the form of written test. It aims at finding out and measuring students' critical thinking skills in mastering materials taught using worksheet. The instrument is in the form of essay test consisting of 5 questions with the indicators of formulating problems, giving hypothesis, doing analysis, concluding, and evaluating.

4. Questionnaire

It is the instrument given to the students in the end of research. The instrument is in the form of table with column consisting of questions and opinion where the options of answers are already determined, the students only need to choose the desired answer. This questionnaire aims at gaining the data about the students' response toward the learning device, learning process, and trained critical thinking skills.

5. Barriers Observation Sheet

It is the observation instrument for the barriers happened during learning activity. The instrument is in the form of table with column consisting of the kind of barriers and alternative solution. The aim of this instrument is to find out the barriers risen during learning activity. It is done by two observers while the solution is discussed by observer and researcher. Data analysis

techniques in the study was conducted by using descriptive analysis that includes:

1. Analysis of Device's Validation

Analysis of the result data of lesson plan validation, teaching materials, students' worksheet, and achievement test result studied by validators to evaluate the eligibility. It is analyzed in descriptive way by averaging the score obtained from the validators. The result is described as follows:

Table 1. Categorizing criteria of lesson plan evaluation

Interval	Assessment Category
1,0 ≤ SV ≤ 1,5	Not eligible
1,6 < SV ≤ 2,5	Less Eligible
2,6 < SV ≤ 3,5	Eligible
3,6 < SV ≤ 4,0	Very eligible

(Adapted from Ratumanan & Laurens, 2011)

Reliability of the instrument is determined based on validators' assessment. The level of reliability is calculated by using the following formulation:

$$R = \frac{A}{D+A} \times 100\%$$

Notes:

A = Agreement between evaluator
D = Disagreement between evaluator
R = Reliability of the Instrument

According to Borich (in Ibrahim, 2005) instrument is said to be reliable if the reliability gained is ≥ 0.75 or 75%.

2. Analysis of the result of device's implementation

a. Implementation of Lesson Plan

The implementation of learning steps is observed by two trained observers so that they can operate observation sheet correctly on the instrument criteria for each phase of learning assessed by providing checklist in implementation column (yes or no) and on assessment columns (5: Very Good, 4: good, 3: Fair, 2: Less good, 1: Not good).

The observation results were analyzed through descriptive quantitative by comparing the average of rating scale given by the two observers with the following assessment criteria:

1,00 ≤ X ≤ 1, 49 : Not good
1,50 ≤ X ≤ 2, 49 : Less good
2,50 ≤ X ≤ 3, 49 : Fairly good
3,00 ≤ X ≤ 4, 49 : Good
4,50 ≤ X ≤ 5,00 : Very good

Findings and Discussion

A. The quality of learning device

The validation of learning device developed in this research is carried out by two validators and supervisors who show that: 1) guided inquiry as the result of development is categorized as eligible; 2) developed lesson plan is categorized as eligible and very eligible; 3) developed worksheet is categorized as eligible for every aspect; 4) developed achievement test is categorized as eligible for every assessment criteria; 5) developed test of critical thinking skill is categorized as eligible.

B. The result of trial II of learning devices

The findings includes process and result of learning including implementation of lesson plan through guided inquiry,

students' activity, students' response, and test of students' critical thinking skill.

1. The implementation of lesson plan

The result of lesson plan implementation can be seen in Table.

No	Aspek yang Diamati	Pertemuan											
		1				2				3			
		P1	P2	Re rata	Ket	P1	P2	Re rata	Ket	P1	P2	Re Rata	Ket
1	Pendahuluan	2,7	2,9	2,8	B	3	3	3	B	3	3	3	B
2	Kegiatan inti	3	3	3	B	3,1	3	3,0	B	3,2	3,1	3,1	B
3	Penutup	3	3	3	B	3	3	3	B	3	3	3	B
4	Suasana kelas	2,7	3,1	2,9	B	3	3	3	B	3,2	3	3,1	B
Jumlah		11,4	12,0	11,7		12,1	12,0	12,0		12,4	12,1	12,2	
Reliabilitas		81,75%				85,09%				89,18%			

Keterangan: SB=Sangat Baik B=Baik

The implementation of lesson plan through guided inquiry is good with the average reliability from 2 observer was 80.3%. It shows that teachers' activity in teaching is suitable with the steps of guided inquiry model. This good implementation of lesson plan is supported by positive response that 83.6% students are interested in joining teaching learning process for other topics, and 83.3% students are interested with new teaching method, worksheet, and classroom atmosphere.

2. Observation result on the students' activity in Teaching Learning process

Students' activity is any activity carried out by students during the teaching learning process. The students' activities can be seen in Table 2.

Table 2. Observation result on the students' activity in Teaching Learning process

No	Students activity	Meeting (%)			Average (%)
		1	2	3	
1	Pay attention to the teacher	14.4	15.4	13.7	14.2
2	Cooperate in group	23.1	22.0	23.2	22.7
3	Discuss with the group members through guided inquiry	22.0	25.0	24.9	24.3
4	Answer the questions in worksheet	9.7	9.5	9.3	10.2
5	Presenting the result of activity	6.8	5.7	4.9	5.8
6	Ask, answer, and respond the question	18.2	16.3	16.4	17.0
7	Irrelevant behavior	1.9	0	1.7	1.2
8	Conclude the result of discussion	0.9	4.8	6.8	4.2

3.Students' response to learning process

Learning devices in this research are responded Positively by the students as presented in Table 3.

Table 3. Students' Response to Learning Process

No	Question	Fun		Not Fun	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	What is your opinion about: a. Learning Materials b. Worksheets c. Teaching Method d. Learning Situation	25 26 23 24	83.33 86.66 76.66 80.00	5 4 7 6	0.16 0.13 0.23 0.20
		New		Not new	
		Frequency	Percentage (%)	Frequency	Percentage (%)
2.	What is your opinion about: a. Learning Materials b. Worksheets c.Teaching Method d. Learning Situation	24 25 25 25	80.00 83.33 83.33 83.33	6 5 5 5	0.20 0.16 0.16 0.16
		Yes		No	
		Frequency	Percentage (%)	Frequency	Percentage (%)
3.	Are you interested in learning?	26	86.66	4	0.13

Table 3 shows that the students' response to the components of the Civics learning activities guided inquiry-oriented collected through questionnaires is very good, and it can be stated that most of the students are interested in learning civics through guided inquiry because it is a new, good, fun and exciting learning.

This is supported by observation of the implementation of lesson plan that shows assessment value of core activities, which has average 3, and is categorized as good. 86.6% of students are interested in participating in learning activities for topics of other materials to train students' critical thinking skills. This is supported by students' learning outcome which is 100% through.

Based on the above data analysis, it was concluded that the students responded positively and well to the learning using worksheets to improve students' critical thinking skills. Good response indicates the motivation of students towards learning is also good. Motivation of students is supported by the theories of motivation

from Westwood (2004) that the implication of learning is to give awards to motivate students. It is reinforced by Daryanto (1993) which states that one of the roles and advantages of learning media is to generate motivation. If students are interested in learning, the information obtained from the senses will be more easily distributed to the brain and is not easily forgotten by long-term memory because it has meaning.

4. Students' Critical Thinking Skills

The test result of the students' critical thinking skills in Table 3 above shows that four of the tested indicators of critical thinking has quite good sensitivity, i.e. answering the question why 0.41, giving reason 0.54, making conclusion of 0.59, and formulating alternative to solve the problem 0.41. Thus, the critical thinking skills test instrument has good sensitivity and fit for use.

Table 4. The calculation of Gain-Score of the critical thinking ability test

Students	Gain (g)	Notes
1	0.29	g-medium
2	0.66	g-medium
3	0.65	g-medium
4	0.90	g-high
5	0.85	g-high
6	0.48	g-medium
7	0.96	g-high
8	0.89	g-high
9	0.65	g-medium
10	0.82	g-high
11	0.63	g-medium
12	0.77	g-high
13	0.69	g-medium
14	0.64	g-medium
15	0.75	g-high
16	0.64	g-medium
17	0.88	g-high
18	0.84	g-high
19	0.53	g-medium
20	0.63	g-medium
21	0.79	g-medium
22	0.69	g-medium
23	0.72	g-high
24	0.68	g-medium
25	0.68	g-medium
26	0.76	g-high
27	0.66	g-medium
28	0.95	g-high
29	0.78	g-high
30	0.99	g-high
gain-score	0.73	g-high

The data shows that the Civics learning process through guided inquiry can improve students' critical thinking skills. This is consistent with Piaget's theory, that the child may think a high level when he has enough concrete experience and guidance to enable the development of concepts and relationships of necessary facts (Nur, 2008).

This is supported by Buris and Garton (2007) that it takes 10 to 16 weeks to familiarize students in improving their critical thinking skills. Meanwhile, according to Vygotsky, learning through guidance occurs through interaction with the teacher or the students who are more capable to make the thought process is open to all students, both from themselves and from other students. In the model of cooperative learning students are exposed to the thought process of their peers (Nur, 2008).

Conclusion

From the data analysis and discussion, it can be concluded that the Civics learning device by using the guided Inquiry in class X SMA Neg. 4 Polewali produced is effective to be used in learning in terms of enforceability of the learning devices, student activities, Student worksheet, Instrument Evaluation, and students 'responses. Most of the students gave a positive response so that the learning device is effective to improve students' learning outcomes and critical thinking skills.

Based on these findings, it is concluded that the application of Guided Inquiry in the development of Civics learning tools to train thinking skills of students is valid, practical and effective to use in learning.

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